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(FILE 'HOME' ENTERED AT 09:31:47 ON 08 SEP 2008)
     FILE 'REGISTRY' ENTERED AT 09:31:57 ON 08 SEP 2008
                STRUCTURE UPLOADED
L2
             21 S L1
L3
            449 S L1 SSS FUL
L4
            387 S L3 AND CAPLUS/LC
L5
             30 S L3 AND 5-7/SZ
L6
             23 S L5 AND CAPLUS/LC
L7
              7 S L5 NOT L6
L8
             62 S L3 NOT L4
     FILE 'CAPLUS' ENTERED AT 09:35:26 ON 08 SEP 2008
L9
            215 S L3
             1 S L5
L10
L11
            ANALYZE L9 1- RN HIT :
                                       387 TERMS
     FILE 'REGISTRY' ENTERED AT 09:37:07 ON 08 SEP 2008
              1 S 486460-32-6/RN
L12
L13
              1 S 654671-78-0/RN
            447 S L3 NOT (L12 OR L13)
L14
     FILE 'CAPLUS' ENTERED AT 09:38:27 ON 08 SEP 2008
L15
             39 S L14
L16
            201 S L12 OR L13
             25 S L15 AND L16
L17
L18
             39 S L15 OR L17
L19
             26 S L18 NOT (2008/SO OR 2007/SO OR 2006/SO OR 2005/SO)
=> d 11
L1 HAS NO ANSWERS
L1
                STR
                0
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Structure attributes must be viewed using STN Express query preparation.

=> d ibib abs hitstr total

G1 C, N

L19 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:447431 CAPLUS

DOCUMENT NUMBER: 148:426742

TITLE: Preparation of indole derivatives for use as DPP-IV

inhibitors

INVENTOR(S): Maddaford, Adrian; Glen, Rebecca; Leese, David Paul;

Hart, Terance William

PATENT ASSIGNEE(S): Peakdale Molecular Limited, UK

SOURCE:

PCT Int. Appl., 48pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

OTHER SOURCE(S):

GI

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2008040974 A1 20080410 WO 2007-GB3758 20071004 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRIORITY APPLN. INFO.: GB 2006-19906 A 20061007 GB 2006-24719 A 20061212

MARPAT 148:426742

Title compds. I [R1-4 independently = H, halo, CF3, CN, NO2, (un) substituted hydrocarbyl, etc.; R5 = H, or (un) substituted hydrocarbyl, etc.; R6 = H, (un)substituted hydrocarbyl or (alkyl)-heterocyclyl; R7-10 independently = H, halo, CF3, CN, NO2, etc.; or R7 or R8 together with R9

or R10 form a (un)substituted carbocycle or a heterocycle; Z = (un) substituted hydrocarbyl or (alkyl)-heterocyclyl], and their pharmaceutically acceptable salts, are prepared and disclosed as dipeptidase peptidase IV (DPP-IV) inhibitors. Thus, e.g., II was prepared in a multi-step synthesis from Et malonyl chloride and 3-(trifluoromethyl)-5,6,7,8-tetrahydro-[1,2,4]triazolo[4,3-a]pyrazine hydrochloride. The exemplar compds. of the invention were evaluated for their DPP-IV inhibitory activity in an enzyme assay, e.g., II showed 56% inhibition at 150 nM concentration As inhibitors of DPP-IV, I should prove useful for treating DPP-IV-mediated diseases such as type II diabetes, arthritis, obesity and

osteoporosis, etc.

TТ 1017683-24-7P 1017683-25-8P 1017683-26-9P 1017683-27-0P 1017683-28-1P 1017683-29-2P

1017683-30-5P 1017683-31-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. as dipeptidyl peptidase IV inhibitors useful in treatment and prevention of DPP-IV-mediated diseases) 1017683-24-7 CAPLUS

RN

1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-CN alpyrazin-7(8H)-v11-4-(2-methyl-1H-indol-3-v1)- (CA INDEX NAME)

RN 1017683-25-8 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3alpyrazin-7(8H)-v1]-4-(1H-indol-3-v1)- (CA INDEX NAME)

RN 1017683-26-9 CAPLUS CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(4-fluoro-1H-indol-3-yl)- (CA INDEX NAME)

- RN 1017683-27-0 CAPLUS
- CN 1-Butanone, 3-amino-4-(5,6-difluoro-1H-indol-3-y1)-1-[5,6-dihydro-3-(trifluoromethy1)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1]- (CA INDEX NAME)

- RN 1017683-28-1 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(4,5,6,7-tetrafluoro-1H-indol-3-yl)- (CA INDEX NAME)

- RN 1017683-29-2 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-

a]pyrazin-7(8H)-y1]-4-(5-fluoro-1H-indol-3-y1)- (CA INDEX NAME)

RN 1017683-30-5 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(6-fluoro-1H-indol-3-yl)- (CA INDEX NAME)

RN 1017683-31-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(7-fluoro-1H-indol-3-yl)- (CA INDEX NAME)

IT 1017683-42-9P 1017683-43-0P 1017683-45-2P 1017683-49-6P

RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of indole derivs. as dipeptidyl peptidase IV inhibitors useful in treatment and prevention of DPP-IV-mediated diseases)

RN 1017683-42-9 CAPLUS

To 1700 of the control of the contro

RN 1017683-43-0 CAPLUS

CN 1-Butanone, 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-yl]-3-nitro-4-(4,5,6,7-tetrafluoro-1H-indol-3-yl)- (CA INDEX NAME)

RN 1017683-45-2 CAPLUS

CN 1-Butanone, 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(5-fluoro-1H-indol-3-yl)-3-nitro- (CA INDEX NAME)

RN 1017683-49-6 CAPLUS

CN 1-Butanone, 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(7-fluoro-1H-indol-3-yl)-3-nitro- (CA INDEX NAME)

IT 1017683-40-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of indole derivs. as dipeptidyl peptidase IV inhibitors useful in treatment and prevention of DPP-IV-mediated diseases) 1017683-40-7 CAPLUS

RN 1017683-40-7 CAPLUS CN 1-Butanone, 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-

CN 1-Butanone, 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(4-fluoro-1H-indol-3-yl)-3-nitro- (CA INDEX NAME)

2

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

L19 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:444614 CAPLUS

DOCUMENT NUMBER: 148:426886

TITLE: Preparation of indazole derivatives for use as DPP-IV

inhibitors

INVENTOR(S): Maddaford, Adrian; Glen, Rebecca; Leese, David Paul;

Hart, Terance William

PATENT ASSIGNEE(S): Peakdale Molecular Limited, UK

SOURCE:

PCT Int. Appl., 52pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	NO.			KIND DATE				APPL	ICAT		DATE							
WO 200	80409	95		A1		2008	0410		WO 2	007-	GB37	88						
W:	AE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,		
	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,		
	GB, GD, GE,						HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,		
	KM,	KN,	KΡ,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,		
	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	PL,		
	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,		
	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw						
RV	: AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,		
	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,		
						GA,												
	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,		
	BY, KG, KZ					ТJ,	TM											
PRIORITY A	. :					GB 2006-19906						A 20061007						
											GB 2006-24719							
OTHER SOURCE	THER SOURCE(S):					MARPAT 148:426886				186								

AB Title compds. I [R1-4 independently = H, halo, CF3, CN, NO2, (un)substituted hydrocarbyl, etc.; R5 = H, or (un)substituted hydrocarbyl,

etc., R7-10 independently = H, halo, CP3, CN, NO2, etc.; or R7 or R8 together with R9 or R10 form a (un) substituted carbocycle or a heterocycle; Z = (un) substituted hydrocarbyl or (alkyl)-heterocyclyl], and their pharmaceutically acceptable salts, are prepared and disclosed as dipeptidase peptidase IV (DPP-IV) inhibitors. Thus, e.g., II was prepared in a multi-step synthesis from 1-(2,4-difluorophenyl) ethanone. The exemplar compds. of the invention were evaluated for their DPP-IV inhibitory activity in an enzyme assay, e.g., II showed 59% inhibition at 150 nM concentration As inhibitors of DPP-IV, I should prove useful for

treating
DPP-IV-mediated diseases such as type II diabetes, arthritis, obesity and
osteoporosis, etc.

IT 1017682-65-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of indazole derivs. as dipeptidyl peptidase IV inhibitors useful in treatment and prevention of DPP-IV-mediated diseases)

RN 1017682-65-3 CAPLUS CN 1-Butanone, 3-amino-

1-Butanone, 3-amino-4-(6,7-difluoro-1H-indazol-3-yl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

F3C

IT 1017682-62-0P 1017682-63-1P 1017682-64-2P 1017682-66-4P 1017682-67-5P 1017682-68-6P 1017682-69-7P

101/002-09-15

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indazole derivs. as dipeptidyl peptidase IV inhibitors useful in treatment and prevention of DPP-IV-mediated diseases) 1017682-62-0 CAPLUS

RN 1017682-62-0 CAPLUS CN 1-Butanone 3-amino-1

1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(1H-indazol-3-yl)- (CA INDEX NAME)

RN 1017682-63-1 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(7-fluoro-1H-indazol-3-yl)- (CA INDEX NAME)

RN 1017682-64-2 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(6-fluoro-1H-indazol-3-yl)- (CA INDEX NAME)

RN 1017682-66-4 CAPLUS

CN 1-Butanone, 3-amino-4-(6,7-difluoro-1H-indazol-3-yl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)-,

10/556,805

phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 1017682-65-3 CMF C17 H16 F5 N7 O

Absolute stereochemistry.

F3C

CM

CRN 7664-38-2 CMF H3 O4 P

RN 1017682-67-5 CAPLUS

CN 1-Butanone, 3-amino-4-(4,7-difluoro-1H-indazol-3-yl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]- (CA INDEX NAME)

RN 1017682-68-6 CAPLUS

CN 1-Butanone, 3-amino-4-(4,6-difluoro-1H-indazol-3-y1)-1-[5,6-dihydro-3-

(trifluoromethy1)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1]- (CA INDEX NAME)

RN 1017682-69-7 CAPLUS

CN 1-Butanone, 3-amino-4-(6,7-difluoro-1H-indazol-3-y1)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1]- (CA INDEX NAME)

IT 1017682-76-6P 1017682-78-8P 1017683-08-7P

1017683-21-4P

RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of indazole derivs. as dipeptidyl peptidase IV inhibitors useful in treatment and prevention of DPP-IV-mediated diseases)

RN 1017682-76-6 CAPLUS CN 1-Butanone, 1-15,6-d

1-Butanone, 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(7-fluoro-1H-indazol-3-yl)-3-nitro- (CA INDEX NAME)

- RN 1017682-78-8 CAPLUS
- CN 1-Butanone, 1-[5,6-dihydro-3-(trifluoromethy1)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(6-fluoro-1H-indazol-3-y1)-3-nitro- (CA INDEX NAME)

- RN 1017683-08-7 CAPLUS
- CN Carbamic acid, N-[1-[[4,7-dif]Luoro-1-[[2-(trimethy]sily]]ethoxy]methyl]-]-IHindazol-3-yl]methyl]-3-[5,6-dihydro-3-(trif]luoromethyl]-1,2,4-triazolo[4,3a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1017683-21-4 CAPLUS

CN Carbamic acid, N-[1-[[4,6-difluoro-1-[[2-(trimethylsily1)ethoxy]methyl]-1Hindazol-3-yl]methyl]-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Me3Si-CH2-CH2-O-CH2

IT 1017682-72-2P 1017682-82-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of indazole derivs. as dipeptidyl peptidase IV inhibitors useful in treatment and prevention of DPP-IV-mediated diseases)

RN 1017682-72-2 CAPLUS

CN 1-Butanone, 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(1H-indazol-3-yl)-3-nitro- (CA INDEX NAME)

RN 1017682-82-4 CAPLUS

CN Carbamic acid, N-[(1R)-1-[(6,7-difluoro-lH-indazol-3-yl)methyl]-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/556,805

L19 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:322138 CAPLUS

DOCUMENT NUMBER: 148:323132

TITLE: Antidiabetic combinations of dipeptidyl peptidase

inhibitors with slow-release biguanides

INVENTOR(S): Sesha, Ramesh

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 23pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080064701	A1	20080313	US 2007-789080	20070424
PRIORITY APPLN. INFO.:			US 2007-789080	20070424
AB The invention discl	oses a	method of	administering an antidiah	etic

The invention discloses a method of administering an antidiabetic combination comprising a DPP inhibitor and a slow-release biguanide to a mammal in need of thereof. The invention further discloses antidiabetic combination comprising a DPP inhibitor and a slow release biguanide for treating diabetes.

IT 486460-32-6, Sitagliptin 654671-78-0, Januvia RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological

activity); PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antidiabetic combinations of dipeptidyl peptidase inhibitors with slow-release biguanides)

RN 486460-32-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 654671-78-0 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

HO—P—OH

CN

IT 1011232-08-8

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antidiabetic combinations of dipeptidyl peptidase inhibitors with slow-release biguanides)

RN 1011232-08-8 CAPLUS

Imidodicarbonimidic diamide, N,N-dimethyl-, hydrochloride (1:1), mixt.
with (3R)-3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-1-butanone phosphate (1:1)
(CA INDEX NAME)

CM

CRN 1115-70-4 CMF C4 H11 N5 . C1 H

● HCl

CM 2

CRN 654671-78-0 CMF C16 H15 F6 N5 O . H3 O4 P

CM 3

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 4

CRN 7664-38-2 CMF H3 O4 P

L19 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:319554 CAPLUS

DOCUMENT NUMBER: 148:347364

TITLE: Combination treatment for diabetes mellitus

INVENTOR(S): Klein, Thomas; Blaser, Anja; Rudolph, Bettina; Kautz,

Ulrich; Selige, Jens; Kromer, Wolfgang

PATENT ASSIGNEE(S): Nycomed GmbH, Germany SOURCE: PCT Int. Appl., 61pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.					D	DATE A			APPL	ICAT	ION		DATE			
WO	2008				A1	-	2008	0313		WO 2	007-	EP59	253		2	0070	904
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
		KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
		GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM									

PRIORITY APPLN. INFO.: EP 2006-120305 A 20060907

The invention is based on the expectation that the use of the selective PDE4 inhibitor (2R, 4aR, 10bR) – 6-(2, 6-dimethoxyy-12, 3-4, 4a, 10b-hexahydrophenanthridin-2-ol (I) or a pharmaceutical acceptable salt thereof in combination with one or two other active compound(s) or pharmaceutically acceptable salt (s) thereof which are used in the treatment of diabets mellitus type 2 and/or type 1 leads to beneficial effects in the treatment of diabets mellitus type 2 and/or type 2 in comparison to the treatment with either the selective I or the above-mentioned active compound(s) alone. Therefore, according to a first aspect of the present invention there is provided a pharmaceutical composition comprising a pharmaceutical formulation including I or a pharmaceutically acceptable salt thereof and one other active compound or a pharmaceutically acceptable salt thereof.

TT 1019200-92-0

RL: PAC (Pharmacological activity); PRPH (Prophetic); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment for diabetes mellitus using combination of (dimethoxypyridinyl)ethoxymethoxyhexahydrophenanthridinol and other agents)

RN 1019200-92-0 CAPLUS

INITION TO THE NOTION OF THE N

CM 1

CRN 864740-19-2 CMF C23 H28 N2 O5

Absolute stereochemistry.

CM 2

CRN 654671-78-0 CMF C16 H15 F6 N5 O . H3 O4 P

CM

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 4

CRN 7664-38-2 CMF H3 O4 P

IT 486460-32-6 1011713-89-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses) (treatment for diabetes mellitus using combination of (dimethoxypyridinyl)ethoxymethoxyhexahydrophenanthridinol and other

agents) RN 486460-32-6 CAPLUS

The standard of the standard o

Absolute stereochemistry.

RN 1011713-89-5 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, mixt. with (2R,4aR,10bR)-6-(2,6-dimethoxy-3-pyridinyl)-9-ethoxy-1,2,3,4,4a,10b-hexahydro-8-methoxy-2-phenanthridinol (CA INDEX NAME)

CM :

CRN 864740-19-2

CMF C23 H28 N2 O5

Absolute stereochemistry.

CM 2

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L19 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:10586 CAPLUS

DOCUMENT NUMBER: 148:106026

TITLE: Preparation of crystalline hydrohalide of an organic

amine

INVENTOR(S): Wieser, Josef; Lengauer, Hannes; Klingler, Elfriede;

Pichler, Arthur; Sturm, Hubert

PATENT ASSIGNEE(S): Sandoz A.-G., Switz. SOURCE: PCT Int. Appl., 77pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA:	ENT I	.00			KIN	D	DATE			APPL		DATE						
						-												
WO	2008	0004	18		A2		2008	0103		WO 2	007-	EP55	96		20070625			
WO	2008	0004	18		A3		2008	0228										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	
		KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW					
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	
		GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA						
TEN	/ 3 DD		CHILA							nn o	000	1161	2.4		3 0	0000	000	

PRIORITY APPLN. INFO.: EP 2006-116134 A 20060627 AB The present invention provides a new method for preparation and

crystallization of

hydrochlorides, hydrobromides or hydroiodides of pharmaceutical compds. or their intermediates in which the base or its acid addition salt is reacted in a solvent with a Trialkylsilylhalogenide. For example, mycophenolate mofetil base 2 g were dissolved in Et acetate 50 mL at room temperature To

solution acetic acid 0.3 mL and trimethylchlorosilane 0.7 mL were added under stirring. After 2 min at room temperature the crystallization started. The suspension

was stirred for 1 h and the precipitate filtered off. The solid was washed

with Et acetate and dried under vacuum at room temperature to vield 2.11 q (97.6 %) of mycophenolate mofetil hydrochloride.

486460-32-6. Sitagliptin

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of crystalline hydrohalide of an organic amine)

RN

486460-32-6 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

IT 1000153-09-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of crystalline hydrohalide of an organic amine)

RN

1000153-09-2 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-CN a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:?), (3R)-(CA INDEX NAME)

Absolute stereochemistry.

●x HCl

L19 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1434290 CAPLUS

DOCUMENT NUMBER: 148:331713

TITLE: Method for preparing sitagliptin hydrochloride crystals used in pharmaceutical drug compositions

INVENTOR(S): Kim, Seong Gyu; Yoo, Seo Hong

PATENT ASSIGNEE(S): Yungjin Pharmaceutical Co., Ltd., S. Korea

SOURCE: Repub. Korean Kongkae Taeho Kongbo, 13pp.
CODEN: KRXXA7

DOCUMENT TYPE: Patent
LANGUAGE: Korean

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2007111099	A	20071121	KR 2006-44005	20060516
PRIORITY APPLN. INFO.:			KR 2006-44005	20060516

AB This invention discloses a new crystal structure of sitagliptin hydrochloride [i.e., (3R)-3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-1-butanone hydrochloride], its preparation method and its application in drug composition

The

powder X-ray diffraction pattern of the sitagliptin hydrochloride crystals has peaks at 20 of 13.7, 18.0, 22.6, 25.7 and 27.0 $^{\circ}$ ± 0.2

IT 1000153-09-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of crystalline sitagliptin hydrochloride for use in pharmaceutical

drug compns.)

RN 1000153-09-2 CAPLUS

CN l-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:?), (3R)-(CA INDEX NAME)

Absolute stereochemistry.

●x HCl

L19 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1275387 CAPLUS

DOCUMENT NUMBER: 147:515050

TITLE: Dipeptidyl peptidase DPP8/9 inhibitors for

immunostimulation to improve efficacy of anticancer

antibodies or chemotherapeutics against cell

APPLICATION NO.

DATE

proliferation disease or cancer

English

KIND DATE

INVENTOR(S): Jesson, Michael I.; McLean, Paul A.; Miller, Glenn T.;

Jones, Barry

PATENT ASSIGNEE(S): Point Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 125pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

							_											
	WO	2007	1272	04		A2	_										0070	424
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,
			GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,
			KN,	KΡ,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	MG,
			MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,
			RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,
								UZ,										
		RW:						CZ,										
								MC,										
								GΑ,										
								MZ,		SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
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(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA

INDEX NAME)
Absolute stereochemistry.

L19 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:762624 CAPLUS

DOCUMENT NUMBER: 147:150836

TITLE: Pharmaceutical compositions of combinations of

dipeptidyl peptidase-4 inhibitors with metformin INVENTOR(S): Kamali, Ashkan; Alani, Laman; Fliszar, Kyle A.; Ghosh,

Soumojeet; Tijerina, Monica

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 19pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

PATENT INFORMATION:

PATENT N	10.		KIND DATE					ICAT						
WO 20070	78726			2007	0712								0061	
WO 20070														
W:	AE, AG,	AL, A	м, ат,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN, CO,	CR, C	U, CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE, GH,	GM, G	T, HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
	KP, KR,	KZ, L	A, LC.	LK,	LR,	LS.	LT,	LU,	LV.	LY.	MA.	MD,	MG,	MK,
	MN, MW,	MX, M	Y, MZ	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
	RS, RU,	SC, S	D, SE	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,
	TZ, UA,	UG, U	S, UZ	VC,	VN.	ZA,	ZM,	ZW						
RW:	AT, BE,	BG, C	H, CY.	CZ.	DE.	DK.	EE.	ES.	FI,	FR.	GB,	GR,	HU,	IE.
	IS, IT,													
	CF, CG,													
	GM, KE,													
	KG, KZ,													
AU 20063	333151		A1	20070	0712	AU 2006-333151						20061212		
EP 19628	327		A2	20080	0903	1	EP 2	006-	3393	29		2	0061	212
R:	AT, BE,	BG, C	H. CY.	CZ.	DE.	DK.	EE.	ES.	FI.	FR.	GB,	GR.	HU.	IE.
	IS, IT, LI													
	BA, HR,								,				,	,
PRIORITY APPI						1	US 2	005-	7509	54P	1	P 2	0051	216

AB Disclosed are pharmaceutical compns. comprising fixed-dose combinations of a dipeptidyl peptidase-4 inhibitor and metformin, methods of preparing such pharmaceutical compns., and methods of treating Type 2 diabetes with such pharmaceutical compns. For example, a coated tablet was prepared by wet granulation from sitagliptin phosphate monohydrate 64.25, metformin hydrochloride 500, polyvinylpyrrolidone 48.2, sodium lauryl sulfate 3.45, microcryst. cellulose (Avicel PH-102), sodium stearyl fumarate 13.8, water q.s., and coating material (Opadry III) 17.2 mg.

WO 2006-US47380

W 20061212

IT 486460-32-6, Sitagliptin 654671-77-9 654671-78-0

. Sitagliptin phosphate

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(pharmaceutical compns. of combinations of dipeptidyl peptidase-4 inhibitors with metformin)

RN 486460-32-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 654671-77-9 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, (3R)-, phosphate, hydrate (1:1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

2 CM

CRN 7664-38-2

CMF H3 O4 P

HO-P-OH OH

654671-78-0 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-CN a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, (3R)-, phosphate (1:1)(CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

L19 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:383544 CAPLUS

DOCUMENT NUMBER: 146:365787

TITLE: Medical agent containing insulin resistance improving

agent

INVENTOR(S): Kanda, Shoichi; Nakashima, Ryutaro

PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan

SOURCE: PCT Int. Appl., 24pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE				APPL			DATE				
	2007				A1		2007	0405							2	0060	928
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
		KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
		RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW							
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM										
EP	1935	432			A1		2008	0625	1	EP 2	2006-81		810697		2	0060	928
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
ORITY	Y APP	LN.	INFO	. : `					JP 2005-283466						A 20050929		
	J. J								1	WO 2	006-	JP31	9239	1	7 2	0060	928

AB The present invention aims to provide a method for treating diabetes which exhibits excellent blood sugar lowering action, while having only few side effects. Specifically disclosed is a pharmaceutical product obtained by combining a DPP-IV inhibitor and an insulin resistance improving agent. For example, tablets were formulated containing rivoglitazone (as insulin resistance improving agent) and MK-0431 (DPP-IV inhibitor).

IT 654671-78-0, MK 0431 930279-24-6 930279-26-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral pharmaceuticals containing DPP-IV inhibitor and insulin resistance improving agent.)

RN 654671-78-0 CAPLUS

1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

PR

CN

10/556,805

CM 2

CRN 7664-38-2 CMF H3 O4 P

RN 930279-24-6 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[(6-methoxy-1-methy_1-]H-benzimidzol-2-y1)methoxy]phenyl]methyl]-, hydrochloride (1:1), mixt. with (3R)-3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-1-butanone phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 299176-11-7 CMF C20 H19 N3 O4 S . C1 H

● HCl

CM :

CRN 654671-78-0 CMF C16 H15 F6 N5 O . H3 O4 P CM 3

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 4

CRN 7664-38-2 CMF H3 04 P

RN 930279-26-8 CAPLUS

CN 2,4-Thiazolidinedione, 5-[[4-[(6-methoxy-1-methyl-1H-benzimidazol-2yl)methoxy]phenyl]methyl]-, mixt. with (3R)-3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5trifluorophenyl)-1-butanone phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 185428-18-6 CMF C20 H19 N3 O4 S

$$\begin{array}{c} \text{N} \\ \text{Me} \end{array}$$

CM 2

10/556,805

CRN 654671-78-0

CMF C16 H15 F6 N5 O . H3 O4 P

CM 3

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 4

CRN 7664-38-2 CMF H3 O4 P

REFERENCE COUNT:

100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:351221 CAPLUS

DOCUMENT NUMBER: 146:365734

TITLE: Dodecylsulfate salt of a dipeptidyl peptidase-IV

inhibitor

INVENTOR(S): Ellison, Martha E.; Peresypkin, Andrey V.; Wenslow,

Robert M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 25pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

		ENT NO.					DATE			APPL							
							2007										
	2007				A2		2007			WO 2	006-	0528	504			0060	/21
WO	2007																
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
		KR.	KZ.	LA.	LC.	LK.	LR,	LS.	LT.	LU.	LV.	LY.	MA.	MD,	MG.	MK.	MN.
							NI,										
							SL,										
							ZM,										
	RW:	AT.	BE.	BG.	CH.	CY.	CZ,	DE.	DK.	EE.	ES,	FI,	FR.	GB,	GR,	HU,	IE,
							MC,										
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AB The dodecylsulfate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo-[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine (1) is a potent inhibitor of dipeptidyl peptidase-IV and is useful for the treatment of Type 2 diabetes. The invention also relates to a crystalline anhydrate of the dodecylsulfate salt as well as a process for its preparation, pharmaceutical compns. containing this

novel

PR

form and methods of use for the treatment of type 2 diabetes, hyperglycemia, insulin resistance, and obesity. I was prepared in a series of steps. Th salt obtained was a crystalline anhydrous substance and characterized by x-ray powder diffraction.

IT 930277-01-3P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(dodecylsulfate salt of a dipeptidyl peptidase-IV inhibitor)

RN 930277-01-3 CAPLUS

2N 1-Dodecanesulfonic acid, compd. with (3R)-3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5trifluorophenyl)-1-butanone (1:1) (CA INDEX NAME)

CM 1

10/556,805

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 1510-16-3 CMF C12 H26 O3 S

HO3S- (CH2)11-Me

IT 486460-32-6P 654671-78-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
 (dodecylsulfate salt of a dipeptidyl peptidase-IV inhibitor)

RN 486460-32-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 654671-78-0 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate (1:1) (CA INDEX NAME)

CM 1

10/556,805

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

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L19 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN
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ACCESSION NUMBER: 2007:227665 CAPLUS

DOCUMENT NUMBER: 146:244370

TITLE: Drug containing FBPase inhibitor and DPP-IV inhibitor

INVENTOR(S): Okuno, Akira; Yoshida, Taishi PATENT ASSIGNEE(S): Sankyo Company, Limited, Japan

SOURCE: PCT Int. Appl., 21pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE .

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:	9										
PATENT NO. KIND I	DATE APPLICATION NO. DATE										
WO 2007023754 A1	20070301 WO 2006-JP316292 20060821										
	AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,										
CN, CO, CR, CU, CZ,	DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,										
	HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,										
	LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,										
	NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,										
	SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,										
UA, UG, US, UZ, VC,	CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,										
	MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,										
	GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH,										
	NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,										
KG, KZ, MD, RU, TJ,											
PRIORITY APPLN. INFO.:	JP 2005-239310 A 20050822										
	146:244370										
	remedy for diabetes which exerts little side										
	rug administration and is efficacious for a										
	tients. Disclosed is a drug comprising a										
	1,6-biphosphatase (FBPase) inhibitor with a P-IV) inhibitor. Thus, the effect of										
	obutvl-4-[2-[5-[N,N'-bis((S)-1-										
	onamide]furanyl]thiazole (I) and MK-0431 on										
	Diabetic Fatty (ZDF) rats was examined Also, a										
	ing I 50, MK-0431 25, lactose 75, corn starch 58										
and	· · · · · · · · · · · · · · · · · · ·										
magnesium stearate 2 mg was											
IT 654671-78-0, MK-0431 925668-											
	tivity); THU (Therapeutic use); BIOL										
(Biological study); USES (Us	ses)										

¹⁷

(antidiabetic drugs comprising combination of FBPase inhibitors and DPP-IV inhibitors)

654671-78-0 CAPLUS RN

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6

CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

925668-18-4 CAPLUS RN CN

L-Alanine, N,N'-[[5-[2-amino-5-(2-methylpropyl)-4-thiazolyl]-2furanyl]phosphinylidene]bis-, 1,1'-diethyl ester, mixt. with (3R)-3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-1-butanone phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 280782-97-0 Absolute stereochemistry.

CMF C21 H33 N4 O6 P S

CM 2

10/556,805

CRN 654671-78-0

CMF C16 H15 F6 N5 O . H3 O4 P

CM 3

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 4

CRN 7664-38-2 CMF H3 O4 P

REFERENCE COUNT:

20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L19 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1177439 CAPLUS

DOCUMENT NUMBER: 145:465736

TITLE: Combination of dipeptidyl peptidase-IV inhibitor and a cannabinoid CB1 receptor antagonist for the treatment

of diabetes and obesity

INVENTOR(S): Amatruda, John M.; Fong, Tung M.; Moller, David E.;

Thornberry, Nancy A.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 54pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT :	KIND DATE						ICAT		DATE									
	2006 2006				A2		20061109 20080228		WO 2006-US16754						20060428				
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GI

- AB The present invention relates to pharmaceutical compns. comprising a combination of a particular disperidyl peptidase—IV (DPP-IV) inhibitor (e.g. (2R)-4-oxo-4-[3-(trifluoromethyl)-5.6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine dihydrogen phosphate monohydrate; free base shown as I) and a particular cannabinoid CBI receptor antagonist/inverse agonist (e.g. N-I(13,2S)-3-(4-chlorophenyl)-2-(3-cyanophenyl)-1-methylpropyl]-2-methyl-2-[[5-(trifluoromethyl)pyridin-2-yl]oxylpropanamide; shown as II), kits containing such combinations and methods of using such compns. for the treatment of diabetes, diabetes associated with obesity, diabetes-related disorders, obesity, and obesity-related disorders (no data). Although the methods of preparation are not claimed, prepns. and/or characterization data for the above examples are included.
 - [IT 486460-32-6P, (2R)-4-0xo-4-[3-(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2amine

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(candidate codrug; combination of dipeptidyl peptidase-IV inhibitor and cannabinoid CB1 receptor antagonist for treatment of diabetes and obesity)

- RN 486460-32-6 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

ΙT 654671-77-9P, (2R)-4-0xo-4-[3-(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-y1]-1-(2,4,5-trifluorophenyl)butan-2amine dihydrogen phosphate monohydrate RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(candidate codrug; combination of dipeptidyl peptidase-IV inhibitor and cannabinoid CB1 receptor antagonist for treatment of diabetes and obesity)

654671-77-9 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, (3R)-, phosphate, hydrate (1:1:1) (CA INDEX NAME)

CM

CN

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM

CRN 7664-38-2 CMF H3 O4 P

T 654671-78-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(candidate codrug; combination of dipeptidyl peptidase-IV inhibitor and cannabinoid CB1 receptor antagonist for treatment of diabetes and obesity)

RN 654671-78-0 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

L19 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1031554 CAPLUS

DOCUMENT NUMBER: 145:397795

TITLE: Preparation of aminobutanoic acid amide derivatives as

dipeptidyl peptidase IV (DPPIV) inhibitors

INVENTOR(S): Lee, Chang-Seok; Koh, Jong Sung; Koo, Ki Dong; Kim,
Geun Tae; Kim, Kyoung-Hee; Hong, Sang Yong; Kim,

Sungsub; Kim, Min-Jung; Yim, Hyeon Joo; Lim, Dongchul; Kim, Hye Jin; Han, Hee Oon; Bu, Seong Cheol; Kwon, Oh Hwan; Kim, Sung Ho; Hur, Gwong-Cheung; Kim, Ji Young;

Yeom, Zi-Ho; Yeo, Dong-Jun HEE(S): Lg Life Sciences, Ltd., S. Korea

PATENT ASSIGNEE(S): Lg Life Sciences, Ltd., S SOURCE: PCT Int. Appl., 197pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.																			
	WO						A1 20061005 AM, AT, AU, AZ,													
		W:																		
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	US	2008	0188	471		A1		2008	0807		US 2	007-	9103	70		2	0071	001		
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OTHER SOURCE(S):

MARPAT 145:397795

AB The invention relates to aminobutanoic acid amide-based compds. of formula ACOCE/CH(NH2)CH2E [A = 3, 4-dihydro-1H-isoquinoiln-2-y1, (un) substituted 5, 8-dihydropyrido[3, 4-d]pyrimidin-7(6H)-y1, 5, 6-dihydro-8H-[1,2,4]triazolo[4,3-a]pyrimidin-7(6H)-y1, 5, 6-dihydro-8H-[1,2,4]triazolo[4,3-a]pyrimidin-7(6H)-y1, 4,5-dihydro-7H-isoxazolo[3,4-c]pyridin-6-y1, etc., B = (un) substituted 2-oxopiperidino, 2-oxomorpholino, 2-oxothiomorpholino, 2-oxopyrrolidin-1-y1, 2-oxo-2,5-dihydro-1H-pyrio-1-y1, etc.] [e.g., I] which have good inhibitory activity against dipeptidyl peptidase IV (DPPIV) and can be used in formulations to treat or prevent DPPIV related diseases, e.g., diabetes mellitus and obesity. Thus, I was prepared by a multistep procedure starting from (35)-[(tert-butoxycarbonyl)amino]-4-hydroxybutanoic acid tert-Bu ester and showed IC50 = 7 nM for inhibition of DPPIV.

ΙT 911634-81-6P 911634-85-0P 911634-91-8P 911634-93-0P 911634-95-2P 911634-96-3P 911634-98-5P 911635-00-2P 911635-03-5P 911635-05-7P 911635-07-9P 911635-09-1P. 1-[(2S)-Amino-4-oxo-4-(3-trifluoromethyl-5,6-dihydro-8H-[1,2,4]triazolo[4,3-a]pyrazin-7-yl)butyl]-(5R)-methylpiperidin-2-one 911635-11-5P 911635-13-7P 911635-15-9P 911635-17-1P 911637-07-5P, (6R)-4-[(2S)-2-Amino-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)vllbutvll-6-methylmorpholin-3-one 911637-09-7P. (6S)-4-[(2S)-2-Amino-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-y1]buty1]-6-methylmorpholin-3-one 911637-11-1P, (5S)-1-[(2S)-2-Amino-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-v1]butv1]-5methylpiperidin-2-one 911637-31-5P 911637-34-8P, (6S)-4-[(2S)-2-Amino-4-oxo-4-[3-(pentafluoroethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-vl]butvl]-6-methylmorpholin-3-one 911637-42-8P 911637-97-3P 911637-98-4P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aminobutanoic acid amide derivs. as dipeptidyl peptidase IV inhibitors for treating diabetes mellitus and obesity)

RN 911634-81-6 CAPLUS

The State of Control of Contro

RN 911634-85-0 CAPLUS

CN 2-Oxazolidinone, 3-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-5-methyl- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911634-91-8 CAPLUS
- CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911634-93-0 CAPLUS
- CN 2-Pyrrolidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-4-methyl- (CA INDEX NAME)

- RN 911634-95-2 CAPLUS
- CN 2-Pyrrolidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-3-fluoro- (CA INDEX NAME)

- RN 911634-96-3 CAPLUS
- CN 2-Pyrrolidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-vl]-4-oxobutyl]- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911634-98-5 CAPLUS
- CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-3-fluoro- (CA INDEX NAME)

RN 911635-00-2 CAPLUS

CN 2-Pyrrolidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-3-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 911635-03-5 CAPLUS

CN 2H-Pyrrol-2-one, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-1,5-dihydro-4-methyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 911635-05-7 CAPLUS

CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-4-methyl- (CA INDEX NAME)

RN 911635-07-9 CAPLUS

CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-5,5-difluoro- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911635-09-1 CAPLUS
- CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-5-methyl-, (5R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911635-11-5 CAPLUS
- CN 2-Pyrrolidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-4-(trifluoromethyl)- (CA INDEX NAME)

- RN 911635-13-7 CAPLUS
- CN 2-Piperidinone, 1-[(28)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-4-(trifluoromethyl)- (CA INDEX NAME)

- RN 911635-15-9 CAPLUS
- CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo(4,3-a)pyrazin-7(8H)-yl]-4-oxobutyl]-5-(trifluoromethyl)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911635-17-1 CAPLUS
- CN 3-Morpholinone, 4-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-6-methyl- (CA INDEX NAME)

RN 911637-07-5 CAPLUS

CN 3-Morpholinone, 4-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-6-methyl-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 911637-09-7 CAPLUS

CN 3-Morpholinone, 4-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-6-methyl-, (6S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 911637-11-1 CAPLUS

CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-5-methyl-, (5S)- (CA INDEX NAME)

10/556,805

RN 911637-31-5 CAPLUS

CN 2-Piperidinone, 1-[(2S)-2-amino-4-[5,6-dihydro-3-(1,1,2,2,2-pentafluoroethy])-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-5,5-difluoro- (CA INDEX NAME)

Absolute stereochemistry.

RN 911637-34-8 CAPLUS

CN 3-Morpholinone, 4-[(2S)-2-amino-4-[5,6-dihydro-3-(1,1,2,2,2-pentafiluoroethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-6-methyl-, (6S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 911637-42-8 CAPLUS

CN 3-Thiomorpholinone, 4-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]-6-methyl- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911637-97-3 CAPLUS
- CN 2-Pyrrolidinone, 1-[(28)-2-amino-4-[5,6-dihydro-3-(trifluoromethy1)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-y1]-4-oxobuty1]-4,4-dimethy1- (CA INDEX NAME)

Absolute stereochemistry.

- RN 911637-98-4 CAPLUS
- CN 3-Azabicyclo[3.1.0]hexan-2-one, 3-[(2S)-2-amino-4-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-oxobutyl]- (CA INDEX NAME)

Absolute stereochemistry.

IT 911634-80-5P 911634-84-9P 911634-90-7P 911634-92-9P 911634-93-4-1P 911634-97-4P 911634-99-6P 911635-01-3P 911635-04-6P 911635-06-8P 911635-08-0P 911635-10-4P 911635-12-6P 911635-14-8P 911635-16-0P 911637-06-4P, tett-Butyl (105)-1[((2R)-2-methyl-5-oxomorpholin-4-

RN

```
v1) methy1]-3-oxo-3-[3-(trifluoromethy1)-5,6-dihydro-[1,2,4]triazolo[4,3-
alpvrazin-7(8H)-vllpropvllcarbamate 911637-08-6P, tert-Butvl
((1S)-1-((2S)-2-methyl-5-oxomorpholin-4-yl)methyl]-3-oxo-3-[3-
(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-
yl]propyl]carbamate 911637-10-0P, tert-Butyl
[(1S)-1-[((5S)-5-methyl-2-oxopiperidin-1-yl)methyl]-3-oxo-3-[3-
(trifluoromethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-
yl]propyl]carbamate 911637-30-4P, tert-Butyl
[(1S)-1-[(5,5-difluoro-2-oxopiperidin-1-v1)methv1]-3-oxo-3-[3-
(pentafluoroethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-
yl]propyl]carbamate 911637-32-6P, tert-Butyl
[(1S)-1-[((2S)-2-methyl-5-oxomorpholin-4-yl)methyl]-3-oxo-3-[3-
(pentafluoroethyl)-5,6-dihydro-[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-
yl]propyl]carbamate 911637-41-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate; preparation of aminobutanoic acid amide derivs. as dipeptidyl
```

peptidase IV inhibitors for treating diabetes mellitus and obesity)

Carbamic acid, [(18)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2-oxo-3-oxazolidinyl)methyl]propyl]-,

Absolute stereochemistry.

911634-80-5 CAPLUS

1.1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 911634-84-9 CAPLUS

CN Carbamic acid, [(1R)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[(5-methyl-2-oxo-3-oxazolidinyl)methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 911634-90-7 CAPLUS

CN Carbamic acid, [[15]-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-yl]-3-oxo-1-[(2-oxo-1-piperidinyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 911634-92-9 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-yl]-1-[(4-methyl-2-oxo-1-pyrrolidinyl)methyl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911634-94-1 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-([3-fluoro-2-oxo-1-pyrrolidinyl)methyl]-3-oxopropyl]-1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

- RN 911634-97-4 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-alpyrazin-7(8H)-yl]-1-[(3-fluoro-2-oxo-1-piperidinyl)methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 911634-99-6 CAPLUS
- CN Carbamic acid, [(15)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo(4,3-a]pyrazin-7(8H)-yl]-1-[(3-methyl-2-oxo-1-pyrrolidinyl)methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911635-01-3 CAPLUS
- CN Carbamic acid, [(1S)-1-[(2,5-dihydro-4-methyl-2-oxo-1H-pyrrol-1-yl)methyl]-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911635-04-6 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3a]pyrazin-7(8H)-yl]-1-[(4-methyl-2-oxo-1-piperidinyl)methyl]-3-oxopropyl]-, l,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911635-06-8 CAPLUS
- CN Carbamic acid, [(1S)-1-[(5,5-difluoro-2-oxo-1-piperidinyl)methyl]-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxopropyl]-,1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

- RN 911635-08-0 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[(5-methyl-2-oxo-1-piperidinyl)methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 911635-10-4 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[[2-oxo-4-(trifluoromethyl)-1-pyrrolidinyl]methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911635-12-6 CAPLUS
- CN Carbamic acid, [(18)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[[2-oxo-4-(trifluoromethyl)-1-piperidinyl]methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911635-14-8 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[[2-oxo-5-(trifluoromethyl)-1-piperidinyl]methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 911635-16-0 CAPLUS

CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[(2-methyl-5-oxo-4-morpholinyl)methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 911637-06-4 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[((2R)-2-methyl-5-oxo-4-morpholinyl]methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911637-08-6 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[([2S)-2-methyl]-5-xo-4-morpholinyl]methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911637-10-0 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[((55)-5-methyl]-2-oxo-1-piperidinyl]methyl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 911637-30-4 CAPLUS
- CN Carbamic acid, [(15)-1-1(5,5-difluoro-2-oxo-1-piperidinyl)methyl]-3-[5,6-dihydro-3-(pentafluoroethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911637-32-6 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(pentafluoroethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[[(2S)-2-methyl-5-oxo-4-morpholinyl]methyl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 911637-41-7 CAPLUS
- CN Carbamic acid, [(1S)-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-[(2-methyl)-5-oxo-4-thiomorpholinyl)methyl]-3-oxopropyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN 2006:768357 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 145:189177 TITLE: Process for the preparation of chiral β -amino acid derivatives by asymmetric hydrogenation of enamino esters and amides using transition metal-complexed chiral ferrocenvldiphosphines INVENTOR(S): Xiao, Yi; Armstrong, Joseph D., III; Krska, Shane W.; Njolito, Eugenia; Rivera, Nelo R.; Sun, Yongkui; Rosner, Thorsten; Clausen, Andrew M. PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 27pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE . English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE DATE ---------20060803 WO 2006-US2147 20060120 WO 2006081151 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM AU 2006208297 A1 20060803 AU 2006-208297 20060120 CA 2594494 A1 20060803 CA 2006-2594494 20060120 EP 1856028 A1 20071121 EP 2006-719111 20060120 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR T 20080731 JP 2007-552303 IN 2007CN02897 Α 20070907 IN 2007-CN2897 20070629 CN 101175714 A 20080507 CN 2006-80002872 20070723 P 20050124 PRIORITY APPLN. INFO.: US 2005-646697P WO 2006-US2147 W 20060120 CASREACT 145:189177; MARPAT 145:189177 OTHER SOURCE(S): The invention relates to a process for the efficient preparation of enantiomerically enriched β-amino acid derivs. R1CH(NH2)CH2CO-Z [Z = OR2, SR2, NR2R3; R1 = alkyl, aryl, heteroaryl, aralkyl, heteroaralkyl; R2, R3 = H, alkyl, aryl, aralkyl; R2R3N = (substituted) 4-7 membered ring] having (R) - or (S) -configuration which are useful in the asym. synthesis

enantiomerically enriched β -amino acid derivs. R1CH(NH2)CH2CO-Z [Z = 0R2, NR2R3; R1 = alkyl, aryl, heteroaryl, aralkyl, heteroaralkyl; R2, R3 = H, alkyl, aryl, aralkyl; R2R3N = (substituted) 4-7 membered ring] having (R)- or (S)-configuration which are useful in the asym. synthesis of biol. active mols. The process comprises an enantioselective hydrogenation of a prochiral β -aminoacrylic acid derivative in the presence of an ammonium salt and a transition metal precursor complexed with a chiral ferrocenyl diphosphine ligand. Thus, (Z)-4-oxo-4-[3-(trifluoromethyl)-5,-6-dihydro-1,2,4-triszol(4,3-a)pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)but-2-en-2-amine (preparation given) was hydrogenated in the presence of chloro(1,5-cyclooctadiene)rhodium(1) dimer, (R,5) tert-Bu Josiphos, and ammonium chloride in MeOH at 100 psi and 50 °C for 18

h to give 97% (R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine in 98-99% enantiomeric excess.

IT 486460-31-5P 486460-32-6P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(Preparation) (preparation of chiral β -amino acid derivs. by asym. hydrogenation of enamino esters and amides using transition metal-complexed chiral ferrocenyldiphosphines)

486460-31-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486460-32-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:729507 CAPLUS

DOCUMENT NUMBER: 143 - 216652

TITLE: Novel crystalline salts of a dipeptidyl peptidase-IV

inhibitor

INVENTOR(S): Ferlita, Russell R.; Hansen, Karl; Vydra, Vicky K.;

Wang, Yaling; Lindemann, Christopher M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA PCT Int. Appl., 40 pp.

SOURCE:

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN	D	DATE				ICAT	DATE								
					A1		2005	0811					20050112							
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,			
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,			
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,			
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,			
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,			
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,			
		AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,			
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,			
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,			
		MR,	NE,	SN,	TD,	TG														
EP	1708	571			A1		2006	1011		EP 2	005-	7055	53		2	0050	112			
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,			
		IE,	SI,	LT,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	IS					
RIT	Y APP	LN.	INFO	. :						US 2	004-	5370	73P	1	P 20040116					
										WO 2005-US951						W 20050112				

ΔR Novel crystalline salts of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-y1]-1-(2,4,5trifluorophenyl)butan-2-amine (I) are potent inhibitors of dipeptidyl peptidase-IV and are useful for the treatment of non-insulin dependent (type 2) diabetes mellitus. The invention also relates to pharmaceutical compns. containing these novel salts, processes to prepare these salts and

pharmaceutical compns. as well as uses thereof for the treatment of type 2 diabetes. The procedure for preparing I is given.

486460-32-6P TΤ

PRI

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(crystalline salts of dipeptidyl peptidase-IV inhibitor)

RN 486460-32-6 CAPLUS

1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-CN a]pvrazin-7(8H)-v1]-4-(2,4,5-trifluorophenv1)-, (3R)- (CA INDEX NAME)

ΙT 862156-86-3P 862156-87-4P 862156-90-9P

862156-92-1P 862156-93-2P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (crystalline salts of dipeptidyl peptidase-IV inhibitor)

RN

862156-86-3 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-CN a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, (3R)-, benzenesulfonate (1:1) (CA INDEX NAME)

CM

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 98-11-3 CMF C6 H6 O3 S

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RN 862156-87-4 CAPLUS
CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(81)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-,
4-methylbenzenesulfonate (1:1) (CA INDEX NAME)
CM 1
CRN 486460-32-6
CMF C16 H15 F6 N5 O
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CM 2

CRN 104-15-4 CMF C7 H8 O3 S

RN 862156-90-9 CAPLUS
CN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-,
(15,4R)-, compd. with 7-[(3R)-3-amino-1-oxo-4-(2,4,5trifluorophenyl)butyl)-5,6,7,8-tetrahydro-3-(trifluoromethyl)-1,2,4triacolo[4,3-a]pyrazine (1:1) (9C1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

CM 2

CRN 3144-16-9 CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (+).

862156-92-1 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride, hydrate CN (1:1:1), (3R)- (CA INDEX NAME)

● HCl

● H2O

RN 862156-93-2 CAPLUS CN 1,2,4-Triazolo[4,3-

1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, (2R,3R)-2,3-dihydroxybutanedioate, hydrate (2:2:1) (9C1) (CA INDEX NAME)

CM :

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 87-69-4 CMF C4 H6 O6

CHE C4 NO OO

IT 486459-71-6 862156-85-2 862156-88-5 862156-89-6 862156-91-0

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(crystalline salts of dipeptidyl peptidase-IV inhibitor)

RN 486459-71-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethy1)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, hydrochloride (1:1), (3R)-(CA INDEX NNBE)

Absolute stereochemistry.

● HCl

RN 862156-85-2 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-1-oxo-4-(2,4,5trifluorophenyl)butyl)-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

CM 2

CRN 87-69-4 CMF C4 H6 O6

Absolute stereochemistry.

OH HO2C R R CO2F

OH RN 862156-88-5 CAPLUS

CN Bicyclo(2.2.1)heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-, compd. with 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazine (1:1) (9CI) (CA INDEX NAME)

CM

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 5872-08-2 CMF C10 H16 O4 S

HO3S-CH2

RN 862156-89-6 CAPLUS

2N 1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, (28,35)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 147-71-7 CMF C4 H6 O6

Absolute stereochemistry.

RN 862156-91-0 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-, (1R,4S)-, compd. with 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tertahydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 35963-20-3 CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L19 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:405417 CAPLUS

DOCUMENT NUMBER: 142:469248

TITLE: Pharmacetical compositions for enhanced absorption

INVENTOR(S): Wong, Patrick S. L.; Yan, Dong

PATENT ASSIGNEE(S): Alza Corporation, USA; Guittard, George V.

SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PA	TENT	NO.		KIND DATE			APPLICATION NO.								DATE					
WO	2005	0419	25		A2		2005	0512												
		AE,								BE	3.	BG.	BR.	BW.	BY.	BZ.	CA.	CH.		
							DE,													
							ID.													
							LV.													
		NO.	NZ.	OM.	PG.	PH.	PL,	PT.	RO.	RU	j.	SC.	SD.	SE.	SG.	SK.	SL.	SY.		
							TZ.													
	RW:	BW,	GH.	GM.	KE.	LS.	MW.	MZ.	NA.	SI	j,	SL.	SZ.	TZ.	UG.	ZM.	ZW.	AM.		
							RU,													
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	17	۲,	LU,	MC,	NL,	PL,	PT,	RO,	SE,		
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CI	1,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,		
		SN,	TD,	TG																
AU	2004	2855	33		A1		2005													
CA	2543	2543238					2005													
US	2005	0158	374		A1		2005	0721		US	20	04-9	9781	41		2	0041	029		
US	2005	0163	848		A1		2005	0728		US	20	04-9	9781	36 37		2	0041	029		
US	2005	0163	849		A1		2005			US	20	04-9	9781	37		2	0041	029		
	2005						2005			US	20	004-9	9781	38		2	0041	029		
	2005								US 2004-978139							20041029				
	2006						2006		US 2004-978252											
EP	1677						2006													
	R:	ΑT,													ΝL,	SE,	MC,	PT,		
		IE,	SI,	FΙ,	RO,	CY,	TR,	BG,	CZ,	EE	٤,	HU,	PL,	SK						
CN	1901 2007	881			A		2007	0124		CN	20	004-	8003	9649		2	0041	029		
JP	2007	5099	73		т		2007	0419		JP	20	106-	5383	23		2	0041	029		
	2006																			
IN	2006	KN01	135		A		2007	0427		IN	20	106-1	KN11	35		2	0060	502		
	2006				A		2006	0721		NO	20	106-2	2504	59P		- 2	0060	531		
RIORIT	Y APP	LN.	TNEO	. :						US	20	103-	5162	59P		P 2	0031	031		
										US	20	103-5	2195	09P 040		۲ Z	0031	112		
										WO	20	1U4-l	US36	U40	1	W 2	0041	029		

AB Disclosed is controlled delivery of pharmaceutical agents and methods, dosage forms and devices therefore. In particular, formulation, dosage forms, methods and devices for enhanced absorption and controlled delivery drug compds. are disclosed. Thus, metformin laurate was prepared and put into a dosage from containing PEG, PVP and Mg stearate.

IT 851476-07-8

RL: FMU (Formation, unclassified); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)

(pharmacetical compns. for enhanced absorption)

RN 851476-07-8 CAPLUS

Absolute stereochemistry.
Double bond geometry as shown.

IT 486460-32-6
 RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (pharmacetical compns. for enhanced absorption)

RN 486460-32-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

L19 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:300188 CAPLUS

DOCUMENT NUMBER: 142:360851

TITLE: Novel crystalline form of a phosphate salt of a

dipeptidyl peptidase-IV inhibitor
INVENTOR(S): Chen, Alex M.; Wenslow, Robert M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

		ENT:				KIND DATE					APPL									
	WO	2005	0301	27		A2		2005									0040			
	WO	2005						2005												
		₩:	ΑE,	ΑG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,		
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,		
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
			NO.	NZ,	OM.	PG.	PH.	PL,	PT.	RO.	RU.	SC.	SD.	SE.	SG.	SK.	SL,	SY,		
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
			AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE.	BG,	CH,	CY,	CZ,	DE,	DK,		
			EE.	ES.	FI.	FR.	GB.	GR,	HU.	IE.	IT.	LU.	MC.	NL.	PL.	PT.	RO.	SE.		
								CF,												
			SN,	TD,	TG															
	EP	1667	524			A2		2006	0614		EP 2	004-	7843	24		20040917				
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
								TR.												
	US	2007	0021	430		A1		2007	0125		US 2	006-	5704		20060303					
PRIOR	RITY	APP	LN.	INFO	. :						US 2	003-	5051	1	P 20030923					
									WO 2004-US30434											

- AB The present invention relates to a novel crystalline anhydrate polymorph of the dihydrogen phosphate salt of (2R)-4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine as well as a process for their preparation, pharmaceutical compns. containing this form, and methods of use of the form for the treatment of diabetes, obesity, and high blood pressure.
- IT 654671-77-9P 654671-78-0P RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (crystalline form of phosphate salt of dispertidyl peptidase-IV inhibitor)
- RN 654671-77-9 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate, hydrate (1:1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

CM 2

CRN 7664-38-2 CMF H3 O4 P

HO-P-OH OН

RN

654671-78-0 CAPLUS
1-Butanone, 3-maino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate (1:1) CN (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

486460-32-6P

RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(crystalline form of phosphate salt of dipeptidyl peptidase-IV inhibitor)

RN

486460-32-6 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-CN a)pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

L19 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:216618 CAPLUS

DOCUMENT NUMBER: 142:303604

TITLE: Novel crystal forms of a dihydrogen phosphate salt of a trizolopyrazine dipeptidyl peptidase IV inhibitor

INVENTOR(S): Wenslow, Robert M.; Armstrong, Joseph D., III; Chen, Alex M.; Cypes, Stephen; Ferlita, Russell R.; Hansen, Karl; Lindemann, Christopher M.; Spartalis, Evangelia

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 49 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.		APPLICATION NO.									
WO 2005020920	A2 20050310	WO 2004-US27983	20040827								
WO 2005020920	A3 20050428										
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,								
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,								
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG,	KP, KR, KZ, LC,								
		MD, MG, MK, MN, MW,									
		RO, RU, SC, SD, SE,									
TJ, TM, TN,	TR, TT, TZ, UA,	UG, US, UZ, VC, VN,	YU, ZA, ZM, ZW								
RW: BW, GH, GM,	KE, LS, MW, MZ,	NA, SD, SL, SZ, TZ,	UG, ZM, ZW, AM,								
		TM, AT, BE, BG, CH,									
EE, ES, FI,	FR, GB, GR, HU,	IE, IT, LU, MC, NL,	PL, PT, RO, SE,								
SI, SK, TR,	BF, BJ, CF, CG,	CI, CM, GA, GN, GQ,	GW, ML, MR, NE,								
SN, TD, TG											
AU 2004268024	A1 20050310	AU 2004-268024	20040827								
AU 2004268024											
CA 2536251	A1 20050310	CA 2004-2536251	20040827								
		EP 2004-782460									
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,								
		TR, BG, CZ, EE, HU,									
CN 1845674	A 20061011	CN 2004-80025043	20040827								
JP 2007504230	T 20070301	JP 2006-525371	20040827								
US 20060287528	A1 20061221	US 2006-569566	20060227								
IN 2006DN01130	A 20070817	IN 2006-DN1130	20060302								
RIORITY APPLN. INFO.:		US 2003-499629P									
		WO 2004-US27983									
THER SOURCE(S):	CASREACT 142:303604										

OTE GT

- AB The present invention relates to crystalline anhydrate polymorphs of (2R)-4-oxo-4-1g-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine dihydrogen phosphate salt (1) as well as a process for their preparation, pharmaceutical compns. containing these novel forms, and methods of use of the novel forms and pharmaceutical compns. for the treatment of diabetes, obesity, and high blood pressure.
- IT 486460-32-6P 654671-78-0P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (crystal forms of a trizolopyrazine dihydrogen phosphate salt dipeptidyl peptidase IV inhibitor)

- RN 486460-32-6 CAPLUS CN 1-Butanone, 3-amino
 - 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 654671-78-0 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate (1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

CM 2

CRN 7664-38-2 CMF H3 O4 P

CN

IT 847445-75-4 847445-76-5 847445-77-6
847445-78-7 847445-79-8 847445-80-1
RL: THO (Therapeutic use); BIOL (Biological study); USES (Uses)
(crystal forms of a trizolopyrazine dihydrogen phosphate salt
dipeptidyl peptidase IV inhibitor)
RN 847445-75-4 CAPLUS

1,2,4-Triazolo[4,3-a]pyrazine,7-[3R]-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, phosphate,compd.with2-propanone(1:1:?)(9CI)(CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

CM 3

CRN 67-64-1 CMF C3 H6 O

H3C-C-CH3

RN 847445-76-5 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine, "-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, phosphate, compd. with acetonitrile (1:1:7) (9CI) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

О НО— Р— ОН ОН

CM 3

CRN 75-05-8 CMF C2 H3 N $H_3C-C = N$

RN 847445-77-6 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R]-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, phosphate, compd. with methanol (1:1:?) (9CI) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

CM 3

CRN 67-56-1 CMF C H4 O

 ${\rm H}_3{\rm C}-{\rm OH}$

CN

RN 847445-78-7 CAPLUS

1,2,4-Triazolo[4,3-a]pyrazine,7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, phosphate,compd. with ethanol (1:1:?) (9CI) (CA INDEX NAME)

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10/556,805
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CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

CM 3

CRN 64-17-5 CMF C2 H6 O

н₃С-- Сн₂-- ОН

CN

RN 847445-79-8 CAPLUS

1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluoropheny])butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, phosphate, compd. with 1-propanol (1:1:7) (9CI) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Page 89

CM 2

CRN 7664-38-2 CMF H3 O4 P

CM 3

CRN 67-63-0 CMF C3 H8 O

OН

H3C-СH-СН3

L19 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:29336 CAPLUS

DOCUMENT NUMBER: 142:114455

TITLE: Preparation of phosphoric acid salt of a β -amino

acid amide dipeptidyl peptidase-IV inhibitor and its

monohydrate

INVENTOR(S): Cypes, Stephen Howard; Chen, Alex Minhua; Ferlita,
Russell R.; Hansen, Karl; Lee, Ivan; Vydra, Vicky K.;

Wenslow, Robert M., Jr.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 33 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PAT	ENT NO.	KIND DATE	APPLICATION NO.	DATE				
WO	W: AE, AG, AL, CN, CO, CR, GE, GH, GM, LK, LR, LS, NO, NZ, OM, TJ, TM, TN, RW: BW, GH, GM, AZ, BY, KG, EE, ES, FI,	AM, AT, AU, AZ, CU, CZ, DE, DK, HR, HU, ID, LL, LT, LU, LV, MA, PG, PH, PL, PT, TR, TT, TZ, UA, KE, LS, MW, MZ, KZ, MD, RU, TJ, FR, GB, GR, HU,	MO 2004-US19683 BA, BB, BG, BR, BW, E DM, DZ, EC, EE, EG, E IN, IS, JP, KE, KG, E MD, MG, MK, MN, MW, M RO, RU, SC, SD, SE, S UG, US, UZ, VC, VN, Y NA, SD, SL, SZ, TZ, U TM, AT, BE, BG, CH, C IE, IT, LU, MC, NL, E CI, CM, GA, GN, GQ, C	BY, BZ, CA, CH, SS, FI, GB, GD, KP, KR, KZ, LC, MX, MZ, NA, NI, SG, SK, SL, SY, CU, ZA, ZM, ZW JG, ZM, ZW, AM, CY, CZ, DE, DK, PI, FT, RO, SE,				
AU CA CA	2004253889 2004253889 2529400 2529400	A1 20050113 C 20071009	CA 2004-2529400	20040618				
EP	IE, SI, LT,	B1 20070912 DE, DK, ES, FR, LV, FI, RO, MK,	EP 2004-755691 GB, GR, IT, LI, LU, N CY, AL, TR, BG, CZ, E	NL, SE, MC, PT, SE, HU, PL, SK, HR				
BR CN AT ES US US MX IN NO	2004011726 1832949 373003 2291907 20050032804 7326708 2005PA13931 2005DN05948 2006000362	A 20060808 A 20060913 T 20070915 T3 20080301 A1 20050210 B2 20080205 A 20060224 A 20080509 A 20060323	MX 2005-PA13931 IN 2005-DN5948 NO 2006-362	20040618 20040618 20040618 20040618 20040623 20051219 20051220 20060123				
	2008022232 APPLN. INFO.:	A 20080310	US 2003-482161P WO 2004-US19683 KR 2005-724825	P 20030624 W 20040618				

AB The invention is related to the preparation of dihydrogenphosphate salt of 4-oxo-4-[3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine (I•H3PO4) which is a potent inhibitor of dipeptidyl peptidase-IV and therefore useful for the prevention and/or treatment of type 2 diabetes. The invention also relates to the preparation of hydrates, in particular a crystalline monohydrate of

the dihydrogenphosphate salt I, its pharmaceutical compns., and methods of use for the treatment of diabetes, obesity, and high blood pressure. Thus, treating II-#ECI (preparation given) with III (preparation given),

by reaction with NH4OAc in MeOH, and hydrogenation gave amine (R)-I.
Reaction of amine (R)-I with 85% aqueous H3PO4 and recrystn. from
isopropanol/water qave (R)-I-#13PO4-H2O.

IIT 654671-77-99, (2R)-4-0xo-4-(3-(trifluoromethyl)-5,6-dihydro[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2amine dihydrogen phosphate monohydrate

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(DPPIV inhibitor; preparation of triazolopyrazine beta amino amide dihydrogenphosphates and their monohydrates as peptidase-iv inhibitor) 654671-77-9 CAPLUS

RN 654671-77-9 CAPLUS
CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-, phosphate, hydrate
(1:1:1) (CA INDEX NAME)

CM 1

CRN 486460-32-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

О НО— Р— ОН ОН

IT 486460-32-6P, (2R)-4-0xo-4-[3-(trifluoromethyl)-5,6-dihydro-

[1,2,4]triazolo[4,3-a]pyrazin-7(8H)-yl]-1-(2,4,5-trifluorophenyl)butan-2-amine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(intermediate; preparation of triazolopyrazine beta amino amide
dihydrogenphosphates and their monohydrates as peptidase-iv inhibitor)

RN 486460-32-6 CAPLUS
CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a)pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

TT 654671-78-0P 823817-57-8P 823817-58-9P

RN

CN

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of triazolopyrazine beta amino amide dihydrogenphosphates and
        their monohydrates as peptidase-iv inhibitor)
    654671-78-0 CAPLUS
    1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-
     a|pvrazin-7(8H)-v1]-4-(2,4,5-trifluorophenv1)-, (3R)-, phosphate (1:1)
     (CA INDEX NAME)
     CM
          1
     CRN 486460-32-6
     CMF C16 H15 F6 N5 O
Absolute stereochemistry.
               NH2
      F
    CM
          2
    CRN 7664-38-2
    CMF H3 O4 P
HO-P-OH
   ÓН
    823817-57-8 CAPLUS
    1,2,4-Triazolo[4,3-a]pyrazine, 7-[3-amino-1-oxo-4-(2,4,5-
     trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, phosphate
     (1:1) (9CI) (CA INDEX NAME)
    CM 1
```

CRN 823817-56-7 CMF C16 H15 F6 N5 O

RN

CN

CM 2

CRN 7664-38-2 CMF H3 O4 P

но- P- он он

RN 823817-58-9 CAPLUS

1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3\$)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(trifluoromethyl)-, phosphate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 823817-55-6 CMF C16 H15 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 7664-38-2 CMF H3 O4 P

IT 823817-56-7

RL: RCT (Reactant): RACT (Reactant or reagent) (preparation of triazolopyrazine beta amino amide dihydrogenphosphates and their monohydrates as peptidase-iv inhibitor)

RN 823817-56-7 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)- (CA INDEX NAME)

IT 823817-55-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of triacolopyrazine beta amino amide dihydrogenphosphates and their monohydrates as peptidase-iv inhibitor)

RN 823817-55-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L19 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1124587 CAPLUS

DOCUMENT NUMBER: 142:69188

TITLE: Combination therapy for the treatment of diabetes Erondu, Ngozi E.; Fong, Tung M.; MacNeil, Douglas J.; INVENTOR(S): Van Der Ploeg, Leonardus H. T.; Kanatani, Akio

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Banvu Pharmaceutical Co., Ltd.

PCT Int. Appl., 109 pp. SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent.

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

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E	PATENT NO.						KIND DATE				APPL			DATE				
ī	WO 20	004	1103	75											20040602			
Ţ	WO 20	004	1103	75		A3		2005	0512									
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
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487064-52-8 487064-54-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dipeptidyl peptidase IV inhibitor; combination therapy of diabetes and diabetes-related disorders using antiobesity agent and antidiabetic agent and other agents)

486459-82-9 CAPLUS RN

1-Butanone, 3-amino-1-(3-ethyl-5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1)-4-(2-fluoropheny1)-, (3R)- (CA INDEX NAME)

CN

Absolute stereochemistry.

- RN 486459-83-0 CAPLUS
- CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(3-ethyl-5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 486459-84-1 CAPLUS
- CN 1-Butanone, 3-amino-1-(5,6-dihydro-3-methyl-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 486459-85-2 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-(3-ethyl-5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-, (3R)- (CA INDEX NAME)

RN 486459-88-5 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 486459-89-6 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-[2-fluoro-4-(trifluoromethyl)phenyl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 486459-97-6 CAPLUS
- CN 1-Butanone, 3-amino-4-(4-bromo-2,5-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 486460-31-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 486460-32-6 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 487064-52-8 CAPLUS
- CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-(2,2,2-trifluoroethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 487064-54-0 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-3-(2,2,2-trifluoroethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (GA INDEX NAME)

L19 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1033551 CAPLUS

DOCUMENT NUMBER: 142:23098

TITLE: Preparation of 3-amino-4-phenylbutanoic acid

derivatives as dipeptidyl peptidase inhibitors for the

treatment or prevention of diabetes

INVENTOR(S): Biftu, Tesfaye; Feng, Danqing Dennis; Liang, Gui-Bai;

Qian, Xiaoxia
PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 66 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	TENT :				KIND DATE					APPL								
WO	2004	1032	76		A2 20041202 A3 20050811													
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
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		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
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			TD,															
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Page 102

2; n = 0-2; p = 1, 2; with the proviso that m + p = 3; X = N, CR2; Ar = 0(un) substituted Ph; R1, R2 = independently H, halo, OH, CN, (CH2) nCO2H and alkyl ester derivs., (CH2)nCONR4R5, (CH2)nNR4R5, (CH2)OCONR4R5, (CH2) nSO2NR4R5, (CH2) nR6, (CH2) nNR7SO2R6, (CH2) nNR7SO2NR4R5, (CH2) nNR7COR7, (CH2) nNR7CO2R6, (CH2) nCOR6, (un) substituted (CH2)n-(hetero)cycloalkyl, (CH2)n-(hetero)aryl, alkyl(thio), alkoxy, alkenyl; R3 = independently H, halo, CN, OH, (un)substituted alkyl, alkoxy; R4, R5, R7 = independently H, tetrazolyl, thiazolyl, (un) substituted (CH2) nPh, (CH2) n-cycloalkyl, alkyl; or NR4R5 = (un) substituted heterocyclyl; R6 = tetrazolyl, thiazolyl, (un) substituted (CH2)nPh, (CH2)n-cycloalkyl, alkyl] as inhibitors of the dipeptidyl peptidase-IV enzyme (DP-IV inhibitors), which are useful in the treatment or prevention of diabetes, particularly type 2 diabetes, and related conditions. The invention is also directed to pharmaceutical compns. comprising I, optionally in combination with one or more addnl. active ingredients, and the use of these compds. and compns. in the prevention or treatment of diseases in which DP-IV is involved. Thus, II. HCl was prepared as a mixture of diastereomers in eight steps by coupling D-alanine Me ester hydrochloride with acrylonitrile and di-tert-Bu dicarbonate, reducing the nitrile to the amine, cyclizing to the 1H-1,4-diazepine-1carboxylate, deprotection, substitution with trimethoxyoxonium tetrafluoroborate, cycloaddn. with hydrazine, deprotection with HCl, and acylation with (3R)-3-[(tert-butoxycarbonyl)amino]-4-(2,4,5trifluorophenyl)butanoic acid. I inhibited human DP-IV produced in a baculovirus expression system with IC50 values of less than about 1 μM. 799768-02-8P 799768-03-9P 799768-04-0P 799768-05-1P 799768-06-2P 799768-08-4P 799768-09-5P 799768-10-8P 799768-11-9P

The invention is directed to the preparation of title compds. I [wherein m = 1,

799768-12-0P 799768-14-2P 799768-15-3P 799768-16-4P 799768-17-5P 799768-19-7P 799768-21-1P 799768-23-3P 799768-24-4P 799768-25-5P 799768-26-6P 799768-27-7P 799768-28-8P 799768-29-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(DP-IV inhibitor; preparation of aminophenylbutanoic acid derivs. as DP-IV inhibitors for treatment of diabetes and related conditions)

RN 799768-02-8 CAPLUS

CN 1-Butanone, 3-amino-1-[(9R)-6,7-dihydro-9-methyl-3-(trifluoromethyl)-5H-1,2,4-triazolo(4,3-a)[1,4]dlazepin-8(9H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1). (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HC1

- RN 799768-03-9 CAPLUS
- CN 1-Butanone, 3-amino-1-[(95)-6,7-dihydro-9-methyl-3-(trifluoromethyl)-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HCl

- RN 799768-04-0 CAPLUS
- CN l-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(9R)-6,7-dihydro-9-methyl-3-(trifluoromethyl)-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HC1

- RN 799768-05-1 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(9S)-6,7-dihydro-9-methyl-3-(trifluoromethyl)-5H-1,2,4-triazolo(4,3-a)[1,4]diazepin-8(9H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HC1

- RN 799768-06-2 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[6,7-dihydro-3-(trifluoromethyl)-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

HC1

- RN
- 799768-08-4 CAPLUS 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-(6,7-dihydro-3-methyl-5H-CN 1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl)-, hydrochloride (1:1), (3R)-(CA INDEX NAME)

Absolute stereochemistry.

● HCl

- 799768-09-5 CAPLUS RN
- 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[3-(4-fluorophenyl)-6,7-CN dihydro-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HCl

799768-10-8 CAPLUS 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[6,7-dihydro-3-CN (trifluoromethyl)-5H-imidazo[1,2-a][1,4]diazepin-8(9H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 799768-11-9 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6,8,9-tetrahydro-3-(trifluoromethyl)-7H-1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl]-, (3R)- (CA INDEX NAME)

RN 799768-12-0 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6,8,9-tetrahydro-3-(trifluoromethyl)-7H-1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl]-, (3R)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 799768-11-9

CMF C17 H18 F5 N5 O

Absolute stereochemistry.

CM :

CRN 76-05-1 CMF C2 H F3 O2

RN 799768-14-2 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6,8,9-tetrahydro-3-(trifluoromethyl)-7H-1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 799768-15-3 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6,8,9-tetrahydro-3-(trifluoromethyl)-7H-1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-,2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 799768-14-2 CMF C17 H17 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 799768-16-4 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-(5,6,8,9-tetrahydro-3-methyl-7H-1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 799768-17-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-(5,6,8,9-tetrahydro-3-methyl-7B-1,2,4-triazolo(4,3-d][1,4]diazepin-7-yl)-, (3R)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 799768-16-4

CMF C17 H21 F2 N5 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 799768-19-7 CAPLUS CN 1-Butanone, 3-amino-

1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6,8,9-tetrahydro-3-[4-(trifluoromethyl)phenyl]-7 μ -1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl]-, (3R)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 799768-18-6 CMF C23 H22 F5 N5 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 799768-21-1 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6,8,9-tetrahydro-3-[4-trifluoromethoxy)phenyl]-7H=1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl]-,(3R)-,2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM :

CRN 799768-20-0 CMF C23 H22 F5 N5 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 799768-23-3 CAPLUS CN 1-Butanone, 3-amino

CM 1

CRN 799768-22-2 CMF C19 H21 F2 N7 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 799768-24-4 CAPLUS

CN 1-Butanone, 3-amino-1-[6,7-dihydro-9-methyl-3-(trifluoromethyl)-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 799768-25-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[6,7-dihydro-9-methyl-3-(trifluoromethyl)-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-, (3R)-(CA INDEX NAME)

RN 799768-26-6 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[6,7-dihydro-3-(trifluoromethyl)-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-, (3R)-(CA INDEX NAME)

Absolute stereochemistry.

- RN 799768-27-7 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-(6,7-dihydro-3-methyl-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 799768-28-8 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[3-(4-fluorophenyl)-6,7-dihydro-5H-1,2,4-triazolo[4,3-a][1,4]diazepin-8(9H)-yl]-, (3R)- (CA INDEX NAME)

RN 799768-29-9 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[6,7-dihydro-3-(trifluoromethyl)-5H-imidazo[1,2-a][1,4]diazepin-8(9H)-yl]-, (3R)- (CA INDEX NAME)

L19 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:857554 CAPLUS

DOCUMENT NUMBER: 141:314625

TITLE: Process for the preparation of β -amino acid amide

dipeptidyl peptidase-IV inhibitors

Yong-Li

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 28 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN	D	DATE			APPLICATION NO.						DATE			
WO	2004	2004087650			A2 A3		20041014 20050113		WO 2004-US8826						20040323				
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,		
		BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,		
		ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,		
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,		
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PRIORITY APPLN. INFO.: US 2003-457976P P
OTHER SOURCE(S): CASREACT 141:314625; MARPAT 141:314625

AB The invention provides a novel process for the preparation of chiral β -amino acid amides I (Ar is Ph which may be substituted by halogen, trifluoromethyl or trifluoromethoxy; R1 is H, alkyl or fluoroalkyl) which are inhibitors of dipeptidyl peptidase-IV and thereby useful for the treatment of Type 2 diabetes. The process involves acylation of 5,6,7,8-tetrahydro-[1,2,4]triazolo[4,3-a]pyrazine (II) or a derivative with a (3R)-3-[(benzyloxy)amino]-4-arylbutanoic acid (III), followed by hydrogenolysis. In an example, I (Ar = 2,5-difluorophenyl, R1 = CF3) was prepared from II.HCl 3-trifluoromethyl derivative (prepared from hydrazine, Et trifluoroacetate, chloroacetyl chloride, and ethylenediamien) and III (Ar = 2,5-difluorophenyl) prepared from 2,5-difluorophenylacetic acid, Meldrum's

GI

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acid, and O-benzylhydroxylamine hydrochloride.

IT 486460-32-6P 767352-27-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process for preparation of triazolopyrazine $\beta\text{-amino}$ acyl derivs. as dipeptidyl peptidase-IV inhibitors)

RN 486460-32-6 CAPLUS

Tourise Tourise Termino 1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 767352-27-2 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-4-(2,5-difluoropheny1)-1-oxobuty1]-5,6,7,8-tetrahydro-3-(trifluoromethy1)-, (2R,3R)-2,3-dihydroxybutanedioate (9CI) (OA INDEX NAME)

CM 1

CRN 486460-31-5 CMF C16 H16 F5 N5 O

Absolute stereochemistry.

CM 2

CRN 87-69-4 CMF C4 H6 O6

L19 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:824045 CAPLUS

DOCUMENT NUMBER: 141:332476

TITLE: Process for preparation of chiral β-amino acid

derivatives

INVENTOR(S): Dreher, Spencer D.; Ikemoto, Norihiro; Njolito,

Eugenia; Rivera, Nelo R.; Tellers, David M.; Xiao, Yi

Merck & Co., Inc, USA PATENT ASSIGNEE(S): PCT Int. Appl., 39 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	ENT :				KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE		
WO	2004	004085661			A2 A3		20041007 20050310			WO 2004-US8533						20040319		
	W:	ΑE,	AG,		AM,	AT,	AU, DE,	AZ,										
		LK,	LR,	LS,	LT,	LU,	ID,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
	BW.	ΤJ,	TM,	TN,	TR,	TT,	PL, TZ, MW,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	Kw.	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			TR,				CG,											
RITY APPLN. INFO.:										US 2003-457128P					P 20030324			

PRI

US 2003-511210P P 20031015

OTHER SOURCE(S): CASREACT 141:332476; MARPAT 141:332476

GI

- A process for the asym. synthesis of enantiomerically enriched AB β -amino acid derivs. I [R1 = H, or alkyl, unsubstituted or substituted with one to five fluorines; R2 = Ph, unsubstituted or independently substituted with one to five substituents: fluorine, trifluoromethyl, or trifluoromethoxy] in a suitable organic solvent is developed, with includes catalytic hydrogenation of Z-enamines II (Y = :CH), which was prepared by addition of L-phenylqlycine amide to β -ketoesters III under acidic conditions, and subsequent catalytic hydrogenolysis of II (Y = CH2). Thus, β -ketoester III (R1 = CF3; R2 = 2,4,5-trifluorophenyl) obtained from 2,4,5-trifluorophenylacetic acid and 3-(trifluoromethyl)-5,6,7,8-tetrahydro[1,2,4]triazolo[4,4alpyrazine hydrochloride was added to L-phenylglycine amide to give Z-enamine II (R1 = CF3; R2 = 2,4,5-trifluorophenyl), which after catalytic hydrogenation in the presence of platinum dioxide, followed by hydrogenolysis with palladium dihydroxide as catalyst gave compound I (R1 = CF3; R2 = 2.4.5-trifluorophenvl) in 94.55% vield and 97% ee. ΙT 769195-20-2P
- RL: RCT (Reactant), SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent), (Reparation); RACT (Reactant or reagent) (Asym. synthesis of chiral β-amino acid derivs. via addition of phenyldlycine amide to triazolopyrazinyl β-ketoesters, followed by catalytic hydrogenolysis)
- RN 769195-20-2 CAPLUS CN Benzeneacetamide, $\alpha = [[(1R) 3 [5, 6 dihydro 3 (trifluoromethyl) 1, 2, 4 triazolo[4, 3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2, 4, 5 trifluorophenyl)methyl]propyl]amino]-, (<math>\alpha$ S) (CA INDEX NAME)

IT 486460-31-5P 486460-32-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (asym. synthesis of chiral β -amino acid derivs. via addition of phenylglycine amide to triazolopyrazinyl β -ketoesters, followed by catalytic hydrogenation of enamines and catalytic hydrogenolysis)

RN 486460-31-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486460-32-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

L19 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:565099 CAPLUS

DOCUMENT NUMBER: 141:123655

TITLE: Preparation of 3-amino-4-phenylbutanoic acid

derivatives as dipeptidyl peptidase inhibitors for the treatment or prevention of diabetes

INVENTOR(S): Duffy, Joseph L.; Edmondson, Scott D.; Kim, Dooseop;

Kirk, Brian A.; Wang, Liping; Weber, Ann E.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 118 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----A1 20040715 WO 2003-US40114 20031216 WO 2004058266 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IM, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2508947 A1 20040715 CA 2003-2508947 20031216 AU 2003-297219 AU 2003297219 A1 20040722 20031216 EP 1583534 20051012 EP 2003-814066 20031216 A1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK T 20060420 JP 2005-509979 JP 2006513265 20031216 US 20060052382 A1 20060309 US 2005-540283 US 2005-540283 20050620 US 2002-435389P P 20021220 US 2003-469315P P 20030509 WO 2003-US40114 W 20031216 20050620 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 141:123655

GI

Title compds. I [wherein X = N or CR2; Ar = (un)substituted Ph; R1, R2 = AB independently H, halo, HO, cyano, (un) substituted alkyl(thio), alkoxy, etc.; R8-R10 = independently H, cyano, carboxy, (un) substituted (cyclo)alkyl, (hetero)aryl, etc.; R11-R13 = independently H, alkyl; with proviso; and pharmaceutically acceptable salts thereof] were prepared as dipeptidyl peptidase inhibitors (no data). For example, Et 7-[(3R)-3-amino-4-(2,5-difluorophenyl)butanoyl]-5,6,7,8tetrahydroimidazo[1,2-a]pyrazine-2-carboxylic acid trifluoroacetic acid salt (II-CF3CO2H) was given in a multiple-step synthesis starting from Et imidazo[1,2-a]pyrazine-2-carboxylate. Thus, I and their pharmaceutical compns. are useful for the treatment or prevention of diseases in which the dipeptidyl peptidase-IV enzyme is involved, such as diabetes and particularly type 2 diabetes (no data). ΙT 723286-07-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of 3-amino-4-phenylbutanoic acid derivs. as dipeptidyl

peptidase inhibitors for treatment or prevention of diabetes) 723286-07-5 CAPLUS

CN

1-Butanone, 3-amino-1-(3-amino-2-cvclopropvl-5,6-dihvdroimidazo[1,2a)pyrazin-7(8H)-y1)-4-(2,4,5-trifluoropheny1)-, (3R)-, 2.2.2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

RN

CRN 723286-06-4

CMF C19 H22 F3 N5 O

Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-5,6,7,8-tetrahydro-, ethyl ester (CA INDEX)

Page 124

NAME)

CN

Absolute stereochemistry.

RN 723285-99-2 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-5,6,7,8-tetrahydro-, ethyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 723285-98-1 CMF C19 H22 F2 N4 O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723286-00-8 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-5,6,7,8-tetrahydro- (CA INDEX NAME)

RN 723286-01-9 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl)-5,6,7,8-tetrahydro-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 723286-00-8 CMF C17 H18 F2 N4 O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723286-02-0 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxamide, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-5,6,7,8-tetrahydro-N,N-dimethyl-,hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

- RN 723286-03-1 CAPLUS
- CN Acetamide, N-[7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazin-2-yl]-2,2,2-trifluoro- (CA INDEX NAME)

- RN 723286-04-2 CAPLUS
- CN Acetamide, N-[7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazin-2-yl]-2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)
 - CM 1
 - CRN 723286-03-1 CMF C18 H17 F6 N5 O2
- Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F-C-CO2H

RN 723286-06-4 CAPLUS

CN 1-Butanone, 3-amino-1-(3-amino-2-cyclopropyl-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-08-6 CAPLUS

CN Acetamide, N-[7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-2cyclopropyl-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazin-3-yl]-2,2,2-trifluoro-(CA INDEX NAME)

723286-09-7 CAPLUS RN CN

/asysorus-/ Arbus Acetamide, N-[7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-2-cyclopropyl-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazin-3-yl]-2,2,2-trifluoro-,2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 723286-08-6 CMF C21 H21 F6 N5 O2

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 O2

RN 723286-10-0 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine-3-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-, ethyl ester, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 723286-11-1 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine-3-carboxamide, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-N-(1,1-dimethylethyl)-5,6,7,8-tetrahydro-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

HC1

10/556,805

RN 723286-13-3 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-3-chloro-5,6,7,8-tetrahydro-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-14-4 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-3-chloro-5,6,7,8-tetrahydro-, ethyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 723286-13-3

CMF C19 H20 C1 F3 N4 O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F-C-CO₂H

RN 723286-15-5 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(1-hydroxyethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-16-6 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-3-(1-hydroxyethyl)-,2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 723286-15-5

CMF C19 H21 F3 N4 O4

Absolute stereochemistry.

CM

CRN 76-05-1

CMF C2 H F3 O2

RN 723286-18-8 CAPLUS

CN 1-Butanone, 3-amino-1-[3-fluoro-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2alpyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:2), (3R)-(CA INDEX NAME)

Absolute stereochemistry.

● 2 HC1

RN 723286-19-9 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[3-ethenyl-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, hydrochloride (1:1), (3R) - (CA INDEX NAME)

Absolute stereochemistry.

● HC1

RN 723286-20-2 CAPLUS

CN 1-Butanone, 3-amino-1-[2-(cyclopropylcarbonyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

RN

723286-21-3 CAPLUS 1-Butanone, 3-amino-1-[2-(cyclopropylcarbonyl)-5,6-dihydroimidazo[1,2-CN a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, (3R)-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

CM

CRN 723286-20-2 CMF C20 H21 F3 N4 O2

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723286-22-4 CAPLUS

1-Butanone, 3-amino-1-(5,6-dihydro-3-methoxy-1,2,4-triazolo[4,3-a]pyrazin-

7(8H)-y1)-4-(2,4,5-trifluoropheny1)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-23-5 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(methylthio)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-24-6 CAPLUS
- CN 1-Butanone, 3-amino-1-[(5R)-5,6-dihydro-5-methyl-3-(trifluoromethyl)-1,2,4-triazolo(4,3-a)pyrazin-7(8H)-yll-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HCl

RN 723286-25-7 CAPLUS

CN 1-Butanone, 3-amino-1-[(5S,8S)-5,6-dihydro-5,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5trifluoromethyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HC1

RN 723286-26-8 CAPLUS

CN 1-Butanone, 3-amino-1-[(58,8R)-5,6-dihydro-5,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HC1

CN

723286-27-9 CAPLUS
1-Butanone, 3-amino-1-[5,6-dihydro-8,8-dimethyl-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 723286-28-0 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-5,5-dimethyl-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HC1

CN

 $723286-29-1 \quad \texttt{CAPLUS} \\ 1-\texttt{Butanone, 3-amino-4-(2,5-difluoropheny1)-1-[5,6-dihydro-2-(4-difluoropheny1)-[5,6-dihydro-2-(4-difluoropheny1)-1-[5,6-dihydro-2-(4-difluorophe$ morpholinylcarbonyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

723286-30-4 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-2-(4-morpholinylcarbonyl)imidazo[1,2a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, (3R)- (CA INDEX NAME)

RN 723286-31-5 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxamide, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-N-(1,1-dimethylethyl)-5,6,7,8-tetrahydro-(CA INDEX NAME)

Absolute stereochemistry.

RN 723286-32-6 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxamide, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-N-(1,1-dimethylethyl)-5,6,7,8-tetrahydro-(CA INDEX NAME)

Absolute stereochemistry.

RN 723286-33-7 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-3-chloro-5,6,7,8-tetrahydro-, ethyl ester (CA INDEX NAME)

RN 723286-34-8 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-3-chloro-5,6,7,8-tetrahydro- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-35-9 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-3-chloro-5,6,7,8-tetrahydro- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-36-0 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxamide, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-5,6,7,8-tetrahydro-N-2H-tetrazo1-5-yl- (CA INDEX NAME)

- RN 723286-37-1 CAPLUS
- CN Imidazo[1,2-apyrazine-2-carboxamide, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-N-5H-tetrazo1-5-yl- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-38-2 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(1-methylethoxy)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

RN 723286-39-3 CAPLUS

CN Acetamide, N-[7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-2-cyclopropyl-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazin-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-40-6 CAPLUS

CN 1-Butanone, 3-amino-1-[2-cyclopropyl-5,6-dihydro-3-[(1-methylethyl)amino]midazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-41-7 CAPLUS

CN 1-Butanone, 3-amino-1-[3-chloro-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-

a|pyrazin-7(8H)-y1]-4-(2,5-difluoropheny1)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-42-8 CAPLUS
- CN 1-Butanone, 3-amino-1-[3-bromo-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,5-difluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-43-9 CAPLUS
- CN Imidazo[1,2-a]pyrazine-2-carboxamide, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-5,6,7,8-tetrahydro-N,N-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-44-0 CAPLUS
- CN Imidazo[1,2-a]pyrazine-2-carboxamide, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-5,6,7,8-tetrahydro- (CA INDEX NAME)

RN 723286-45-1 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine-3-carboxamide, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-N-(1,1-dimethylethyl)-5,6,7,8-tetrahydro-(CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-46-2 CAPLUS
- CN 1-Butanone, 3-amino-1-[3-fluoro-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-47-3 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[3-ethenyl-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 723286-48-4 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-5,5-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-49-5 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-8,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-50-8 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-5,8-dimethyl-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

- RN 723286-51-9 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-5-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-52-0 CAPLUS
- CN 1-Butanone, 3-amino-1-[(5S)-5.6-dihydro-5-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HC1

CN

723286-53-1 CAPLUS 1-Butanone, 3-amino-1-[(5R,8R)-5,6-dihydro-5,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-a)trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HC1

RN 723286-54-2 CAPLUS

CN 1-Butanone, 3-amino-1-[(5R,8S)-5,6-dihydro-5,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-a)trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HC1

IT 723286-62-2

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 3-amino-4-phenylbutanoic acid derivs. as dipeptidyl peptidase inhibitors for treatment or prevention of diabetes)

RN 723286-62-2 CAPLUS

CN Imidazo[1,2-a]pyrazine-2-carboxylic acid, 7-[(3R)-4-(2,5-difluorophenyl)-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-oxobutyl]-5,6,7,8-tetrahydro-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

723286-58-6P 723286-61-1P 723286-65-5P

723286-69-9P 723286-72-4P 723286-74-6P

723286-76-8P 723286-78-0P 723286-99-5P 723286-92-8P 723286-95-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of 3-amino-4-phenylbutanoic acid derivs. as dipeptidyl

peptidase inhibitors for treatment or prevention of diabetes)

RN 723286-58-6 CAPLUS CN Carbamic acid, [(1R

Carbamic acid, [(1R)-3-[5,6-dihydro-2-[(trifluoroacetyl)amino]imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

Absolute stereochemistry.

ΤТ

- RN 723286-61-1 CAPLUS
- CN Carbamic acid, [(1R)-3-[2-cyclopropyl-5,6-dihydro-3-[(1,1,3,3-tetramethylbutyl)amino]imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 723286-65-5 CAPLUS
- CN Carbamic acid, [(1R)-3-[2-cyclopropy]-5,6-dihydro-3-[(trifluoroacetyl)amino]imidazo[1,2-alpyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 723286-69-9 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyrazine-3-carboxylic acid, 7-[(3R)-3-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-72-4 CAPLUS

CN Carbamic acid, [(1R)-3-[3-[((1,1-dimethylethyl)amino]carbonyl]-5,6-dihydro-1,2,4-triazolo[(4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 723286-74-6 CAPLUS

CN Carbamic acid, [(1R)-3-[3-fluoro-5,6-dihydro-2 (trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5 trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 723286-76-8 CAPLUS

CN Carbamic acid, [(1R)-1-[(2,5-difluorophenyl)methyl]-3-[3-ethenyl-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 723286-78-0 CAPLUS
- CN Carbamic acid, [(1R)-3-[2-(cyclopropylcarbonyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 723286-84-8 CAPLUS
- CN Carbamic acid, [(1R)-3-(5,6-dihydro-3-methoxy-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-3-oxo-1-((2,4,5-trifluorophenyl)methyl)propyl]-, 1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

Absolute stereochemistry.

- RN 723286-92-8 CAPLUS
- CN Carbamic acid, N=[(1R)-3-[(55,8R)-5,6-dihydro-5,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 723286-96-2 CAPLUS
- CN Carbamic acid, [(1R)-3-[5,6-dihydro-8,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 723286-99-5 CAPLUS
- CN Carbamic acid, N-[(1R)-3-[(5R,8S)-5,6-dihydro-5,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

L19 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:796660 CAPLUS

DOCUMENT NUMBER: 139:307796

TITLE: Preparation of aminoacylimidazo- and triazolopyrazines as dipeptidyl peptidase inhibitors for the treatment

or prevention of diabetes

INVENTOR(S): Brockunier, Linda L.; Duffy, Joseph L.; Kim, Dooseop;

Parmee, Emma R.; Weber, Ann E.

Merck & Co., Inc., USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 84 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

English LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.									APPLICATION NO.								
WO					A2 20031009			WO 2003-US8723										
		AE, CO,	AG, CR,	AL, CU,	AM, CZ,	AT, DE,	AU, DK,	AZ, DM,	DZ,	EC	, BG, , EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW	, KG, , MX, , SL,	MZ,	NI,	NO,	NZ,	OM,	PH,	
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, ZW							
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	RIORITY APPLN. INFO.:										2002- 2003-							
OTHER SO	THER SOURCE(S):					MARPAT 139:30779				****	2005-	0007			. 2		,	

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AB Title compds. I [Ar = (un)substituted Ph; X = N, (un)substituted CH2; R1 = H, CN, (un)substituted alkyl, Ph, heterocyclic; R2, R3 = H, CN, (un)substituted alkyl, Ph, naphthyl, CO2H, COHH2, cycloalkyl] were prepared for use as dipeptically peptidase-IV inhibitors in the treatment or prevention of diseases, such as diabetes and particularly type 2 diabetes. Thus, 6-benzyl-3-methyl-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazine was prepared in 5 steps from 2-benzyloxirane and was acylated with (R)-3,4-F2C6H3CH2CH(NHCO2CMe3)CH2CO2H and deblocked to give the imidazopyrazine II.

II 611240-60-9P 611240-63-2P 611240-81-4P
611240-83-6P 611240-84-7P 611240-85-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation of aminoacylimidazo- and triazolopyrazines as dipeptidyl
peptidase inhibitors for the treatment or prevention of diabetes)

peptidase inhibitors 611240-60-9 CAPLUS

CN Carbamic acid, [(1R)-1-[(3,4-difluorophenyl)methyl]-3-[5,6-dihydro-3-methyl-6-(phenylmethyl)lmidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CR INDEX NAME)

Absolute stereochemistry.

RN

- RN 611240-63-2 CAPLUS
- CN Carbamic acid, [(1R)-1-[(3,4-difluorophenyl)methyl]-3-[5,6-dihydro-3-methyl-6-(phenylmethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxopropyl]-,1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

- RN 611240-81-4 CAPLUS
- CN Carbamic acid, [(1R)-3-[5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-83-6 CAPLUS
- CN Carbamic acid, [(1R)-3-[(8S)-5,6-dihydro-8-methyl-2- (trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5- trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

- RN 611240-84-7 CAPLUS

- RN 611240-85-8 CAPLUS
- CN Carbamic acid, [(IR)-1-[(3,4-difluorophenyl)methyl]-3-[8-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (901) (CA INDEX NAME)

10/556,805

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611239-93-1P 611239-94-2P 611239-96-4P
611239-97-5P 611239-99-7P 611240-00-7P
611240-01-8P 611240-02-9P 611240-03-0P
611240-04-1P 611240-05-2P 611240-06-3P
611240-07-4P 611240-08-5P 611240-09-6P
611240-10-9P 611240-11-0P 611240-12-1P
611240-13-2P 611240-14-3P 611240-15-4P
611240-16-5P 611240-17-6P 611240-18-7P
611240-19-8P 611240-20-1P 611240-21-2P
611240-22-3P 611240-23-4P 611240-24-5P
611240-25-6P 611240-26-7P 611240-27-8P
611240-28-9P 611240-29-0P 611240-30-3P
611240-31-4P 611240-32-5P 611240-33-6P
611240-34-7P 611240-35-8P 611240-36-9P
611240-37-0P 611240-38-1P 611240-39-2P
611240-40-5P 611240-41-6P 611240-42-7P
611240-43-8P 611240-44-9P 611240-45-0P
611240-80-3P 611240-82-5P 611240-87-0P
611240-88-1P
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RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoacylimidazo- and triazolopyrazines as dipeptidyl peptidase inhibitors for the treatment or prevention of diabetes)

RN 611239-93-1 CAPLUS CN 1-Butanone, 3-amino

1 -Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-methyl-6-(phenylmethyl)lmidazo[1,2-a]pyrazin-7(8H)-yl]-, hydrochloride (1:2), (3R)-(CA INDEX NAME)

Absolute stereochemistry.

● 2 HC1

RN 611239-94-2 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-methyl-6-(phenylmethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HCl

CN

611239-96-4 CAPLUS 1-Butanone, 3-amino-1-[(8S)-5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluorophenyl)-, (3R)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 611239-95-3

CMF C17 H17 F6 N5 O

Absolute stereochemistry.

CM

CRN 76-05-1

CMF C2 H F3 O2

611239-97-5 CAPLUS 1-Butanone, 3-amino-1-[(8S)-5,6-dihydro-8-methyl-2-

(trifluoromethy1) imidazo[1,2-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, hydrochloride (1:2), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

RN 611239-99-7 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[(88)-8-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM :

CRN 611239-98-6

CMF C23 H20 F6 N4 O

Absolute stereochemistry.

CM 2

CRN 76-05-1

CMF C2 H F3 O2

10/556,805

RN 611240-00-7 CAPLUS

CN Imidazo[1,2-a]pyrazine-8-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-2-(trifluoromethyl)-, methyl ester, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

RN 611240-01-8 CAPLUS

CN 1-Butanone, 3-amino-1-[(6R)-5,6-dihydro-6-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 611240-02-9 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-6,8-dimethyl-3-(trifluoromethyl)-1,2,4-

triazolo[4,3-a]pyrazin-7(8H)-y1]-4-(2,4,5-trifluoropheny1)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HCl

- RN 611240-03-0 CAPLUS
- National Control of the Control

Absolute stereochemistry.

● HCl

- RN 611240-04-1 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-6,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo(4,3-a]pyrazin-7(8H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HC1

- RN 611240-05-2 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8S)-8-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-06-3 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8R)-8-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 611240-07-4 CAPLUS

CN 1-Butanone, 3-amino-1-[(88)-5,6-dihydro-2-(trifluoromethyl)-8-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2-fluorophenyl)-, (3R) (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-08-5 CAPLUS

CN 1-Butanone, 3-amino-1-[(8R)-5,6-dihydro-2-(trifluoromethyl)-8-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-09-6 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8S)-5,6-dihydro-8-methyl-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-10-9 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8R)-5,6-dihydro-8-methyl-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-11-0 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(88)-8-ethyl-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-12-1 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8R)-8-ethyl-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 611240-13-2 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8S)-5,6-dihydro-8-(1-methylethyl)-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)-(CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-14-3 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8R)-5,6-dihydro-8-(1-methylethyl)-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)-(CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-15-4 CAPLUS
- CN l-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[6-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

- RN 611240-16-5 CAPLUS
- CN 1-Butanone, 3-amino-4-(2-fluorophenyl)-1-[6-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

- RN 611240-17-6 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(6R)-5,6-dihydro-6-methyl-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-18-7 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(6S)-5,6-dihydro-6-methyl-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 611240-19-8 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(6R)-5,6-dihydro-2-(trifluoromethyl)-6-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-20-1 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(68)-5,6-dihydro-2-(trifluoromethyl)-6-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NARE)

Absolute stereochemistry.

- RN 611240-21-2 CAPLUS
- CN 1-Butanone, 3-amino-1-[(8S)-8-ethyl-5,6-dihydro-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

RN 611240-22-3 CAPLUS

CN 1-Butanone, 3-amino-1-[(8R)-8-ethyl-5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-23-4 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(88)-5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-24-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[(8R)-5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 611240-25-6 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-methyl-6-(phenylmethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-26-7 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-methyl-6-(phenylmethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-27-8 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

RN 611240-28-9 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-8-methyl-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-29-0 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[8-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-30-3 CAPLUS

CN Imidazo[1,2-a]pyrazine-8-carboxylic acid, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-2-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} F & & & & \\ \hline \\ NH_2 & & & & \\ \hline \\ R & & & & \\ \end{array} \begin{array}{c} O & O Me \\ \hline \\ N & & \\ \end{array} \begin{array}{c} CF_3 \\ \end{array}$$

- RN 611240-31-4 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[8-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-32-5 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-2-(trifluoromethyl)-8-[3-(trifluoromethyl)phenyl]midazo[1,2-a]pyrazin-7(8H)-yl]-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

CN

RN 611240-33-6 CAPLUS

1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-8-methyl-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-34-7 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[8-ethyl-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-35-8 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-8-(1-methylethyl)-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 611240-36-9 CAPLUS

CN 1-Butanone, 3-amino-4-(3-fluorophenyl)-1-[6-(4-fluorophenyl)-5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 611240-37-0 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-6-methyl-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-38-1 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-2-(trifluoromethyl)-6-[3-(trifluoromethyl)phenyl]imidazo[1,2-a]pyrazin-7(8H)yl]-, (3R)- (CA INDEX NABE)

Absolute stereochemistry.

RN 611240-39-2 CAPLUS

CN 1-Butanone, 3-amino-1-[8-ethyl-5,6-dihydro-3-(trifluoromethyl)-1,2,4triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

- RN 611240-40-5 CAPLUS
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

- RN 611240-41-6 CAPLUS
- CN 1-Butanone, 3-amino-1-[(6S)-5,6-dihydro-6-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 611240-42-7 CAPLUS
- CN 1-Butanone, 3-amino-1-[(6R)-5,6-dihydro-6-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

RN 611240-43-8 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-6,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-44-9 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-6-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 611240-45-0 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-6,8-dimethyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 611240-80-3 CAPLUS

CN 1-Butanone, 3-amino-1-[(8R)-5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pytazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)-,2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 611240-79-0 CMF C17 H17 F6 N5 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CMF C2 H F3 O2

CN

RN 611240-82-5 CAPLUS

1-Butanone, 3-amino-1-[(8R)-5,6-dihydro-8-methyl-2-(trifluoromethyl)limidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-,hydrochloride (1:2), (3R)- (CA INDEX NAME)

●2 HC1

611240-87-0 CAPLUS
1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[(8R)-8-(4-fluorophenyl)-5,6-CN dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 611240-86-9 CMF C23 H20 F6 N4 O

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

- RN 611240-88-1 CAPLUS
- CN 1-Butanone, 3-amino-1-[(6S)-5,6-dihydro-6-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(BH)-yll-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

● HCl

L19 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:42275 CAPLUS

DOCUMENT NUMBER: 138:106717

TITLE: Preparation of β-amino tetrahydroimidazo[1,2-

a]pyrazines and tetrahydrotrioazolo[4,3-a]pyrazines as dipeptidyl peptidase inhibitors for the treatment or

prevention of diabetes

INVENTOR(S): Edmondson, Scott D.; Fisher, Michael H.; Kim, Dooseop;

MacCoss, Malcolm; Parmee, Emma R.; Weber, Ann E.; Xu,

Jinyou
PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

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PA:	TENT :	NO.			KIN		DATE			APPL	ICAT	ION :	NO.		D.	ATE	
WO	© 2003004498						2003	0116		WO 2002-US21349					20020705		
							AU,								CA,	CH,	CN,
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							EE,										
							BJ.										
		NE.	SN,	TD.	TG												
CA	2450 2450 2002 2002 2003 6699	740			A1		2003	0116		CA 2	002-	2450	740		2	0020	705
CA	2450	740			С		2006	0214									
AU	2002	3203	03		A1		2003	0121		AU 2	002-	3203	03		2	0020	705
ΑU	2002	3203	03		B2		2004	1014									
US	2003	0100	563		A1		2003	0529		US 2	002-	1896	03		2	0020	705
US	6699	871			B2		2004	0302									
ΕP	1412	35/			Al		2004	U428		EP 2	002-	7498	13		2	0020	705
ΕP	1412	357			B1		2006	0322									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
BR	2002	0108	66		A		2004	0629		BR 2	002-	1086	6		2	0020	705
CN	1524082				A		2004	0825		BR 2002-10866 CN 2002-813558 HU 2004-1104					20020705		
HU	2004001104				A2		2004	0928		HU 2	004-	1104			2	0020	705
HU	2004	0011	04		A3		2006	0228									
HU	2256	95			B1		2007	0628									
JΡ	2256 2004 3762 2263 5298	5361	15		T		2004	1202		JP 2	003-	5106	65		2	0020	705
JP	3762	407			B2		2006	0405									
TW	2263	31			В		2005	0111		TW 2	002-	9111	4990		2	0020	705
NZ	5298	33			A		2005	0128		NZ 2	002-	5298	33		2	0020	705
EΡ	1023	04/			MI		2000	0213		EF 2	005-	1130	**			0020	703
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	3210	48			T		2006 2006 2006 2006	0415		AT 2	002-	7498	13		2	0020	705
	1412	357			T		2006	0731		PT 2	002-	7498	13		2	0020	705
	2259	713			Т3		2006	1016		ES 2	002-	7498	13		2	0020	705
CN	1861	077			A		2006	1115		CN 2	006-	1007	7691		2	0020	705

PL 196278	B1	20071231	PL	2002-367279		20020705
ZA 2003009294	A	20040722	ZA	2003-9294		20031128
US 20040167133	A1	20040826	US	2003-481353		20031219
US 7125873	B2	20061024				
BG 108493	A	20050430	BG	2003-108493		20031222
NO 321999	B1	20060731	NO	2004-21		20040105
IN 2004CN00026	A	20051202	IN	2004-CN26		20040106
MX 2004PA00018	A	20040521	MX	2004-PA18		20040107
HK 1068882	A1	20070504	HK	2005-101300		20050216
US 20060270679	A1	20061130	US	2006-500252		20060807
PRIORITY APPLN. INFO.:			US	2001-303474P	P	20010706
			CN	2002-813558	A3	20020705
			EP	2002-749813	A3	20020705
			WO	2002-US21349	W	20020705
			US	2003-481353	A1	20031219

OTHER SOURCE(S): MARPAT 138:106717

GI

AB β-Amino tetrahydroimidazo[1,2-a]pyrazines and tetrahydrotrioazolo[4,3-a]pyrazines [e.g., 1; wherein Ar = (substituted) phenyl; X = N, CR2; R1, R2, independently = H, CN, (branched) (substituted) (C1-C10)alkyl, (substituted) Ph, (saturated) 5- or 6-membered heterocycle, etc.] were prepared For example, 7-[(3R)-3-amino-4-(3,4-difluorophenyl)butanoyl]-2- (trifluoromethyl)-5,6,7,8-tetrahydroimidazo[1,2-a]pyrazine (II) was prepared in several steps. The prepared compds. are inhibitors of the dipeptidyl peptidase-IV enzyme ("DP-IV inhibitors") and, thus, are useful in the treatment or prevention of diseases in which the dipeptidyl peptidase-IV enzyme is involved, such as type 2 diabetes (no data).

II 486459-65-8P 486459-66-9P 486459-67-0P 486459-68-1P 486459-69-2P 486459-70-5P 486459-71-6P 486459-72-7P 486459-73-8P 486459-74-9P 486459-75-0P 486459-76-1P 486459-77-2P 486459-78-3P 486459-79-4P 486459-80-7P 486459-81-8P 486459-82-9P 486459-83-0P 486459-84-1P 486459-85-2P 486459-86-3P 486459-87-4P 486459-88-5P RN

CN

486459-89-6P 486459-93-2P 486459-94-3P
486459-95-4P 486459-96-5P 486459-97-6P
486460-27-9P 486460-28-0P 486460-29-1P
486460-30-4P 486460-31-5P 486460-32-6P
487064-52-8P 487064-54-0P 487064-56-2P
RL: PRC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of β-amino tetrahydroimidazo[1,2-a]pyrazines and tetrahydrotrioazolo[4,3-a]pyrazines as dipeptidyl peptidase inhibitors)
486459-65-8 CAPLUS
1-Buttanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-2-(trifluoromethyl)Imidazo[1,2-a]pyrazin-7(8H)-yl]-, hydrochloride (1:2),

Absolute stereochemistry.

(3R) - (CA INDEX NAME)

●2 HCl

RN 486459-66-9 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluoropheny1)-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-y1]-, hydrochloride (1:2), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

RN 486459-67-0 CAPLUS

I-Butanone, 3-amino-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:2), (3R)-

(CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 486459-68-1 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)-, hydrochloride (1:2), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● 2 HC1

RN 486459-69-2 CAPLUS

1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(3-ethyl-5,6-dihydro-1,2,4-triazolo(4,3-a]pyrazin-7(8H)-yl)-, hydrochloride (1:2), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

CN

●2 HC1

RN 486459-70-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, hydrochloride (1:1), (3R)- (CA INDEX NAME)

Absolute stereochemistry.

● HC1

RN 486459-71-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3alpyrazin-7(0H)-yl]-4-(2,4,5-trifluorophenyl)-, hydrochloride (1:1), (3R)-(CA INDEX NAME)

● HC1

RN 486459-72-7 CAPLUS

CN 1-Butanone, 3-amino-1-(2-ethyl-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-73-8 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(2-ethyl-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-74-9 CAPLUS

CN 1-Butanone, 3-amino-1-(5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

486459-75-0 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2a]pyrazin-7(8H)-y1]-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- 486459-76-1 CAPLUS 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[2-(4-fluorophenyl)-5,6-CN dihydroimidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 486459-77-2 CAPLUS
- CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(5,6-dihydro-2phenylimidazo[1,2-a]pyrazin-7(8H)-y1)-, (3R)- (CA INDEX NAME)

RN 486459-78-3 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-2-(4-methoxyphenyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-79-4 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[2-(3,4-difluorophenyl)-5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-80-7 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-2-[4-(trifluoromethoxy)phenyl]imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 486459-81-8 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-2-(1,1,2,2,2-pentafluoroethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-82-9 CAPLUS

CN 1-Butanone, 3-amino-1-(3-ethyl-5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-83-0 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(3-ethyl-5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-, (3R)- (CA INDEX NAME)

RN 486459-84-1 CAPLUS

CN 1-Butanone, 3-amino-1-(5,6-dihydro-3-methyl-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1)-4-(2-fluoropheny1)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN

486459-85-2 CAPLUS 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-(3-ethyl-5,6-dihydro-1,2,4-CN triazolo[4,3-a]pyrazin-7(8H)-yl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-86-3 CAPLUS

CN 1-Butanone, 3-amino-1-(5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-y1)-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

RN 486459-87-4 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-88-5 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-89-6 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-[2-fluoro-4-(trifluoromethyl)phenyl]-, (3R)- (CA INDEX NAME)

RN 486459-93-2 CAPLUS

CN 1-Butanone, 3-amino-1-(5,6-dihydro-3-phenylimidazo[1,2-a]pyrazin-7(8H)-y1)-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-94-3 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a)pyrazin-7(8H)-yl]-4-[2-fluoro-4-(trifluoromethyl)phenyl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-95-4 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-2-(1,1,2,2,2-pentafluoroethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R) (CA INDEX NAME)

RN 486459-96-5 CAPLUS

CN 1-Butanone, 3-amino-4-(4-bromo-2,5-difluorophenyl)-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486459-97-6 CAPLUS

CN 1-Butanone, 3-amino-4-(4-bromo-2,5-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486460-27-9 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 486460-28-0 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-diffluorophenyl)-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & \\ & & \\$$

RN 486460-29-1 CAPLUS

CN 1-Butanone, 3-amino-1-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 486460-30-4 CAPLUS

CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-(5,6-dihydroimidazo[1,2-a]pyrazin-7(8H)-yl)-, (3R)- (CA INDEX NAME)

RN 486460-31-5 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 486460-32-6 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 487064-52-8 CAPLUS
- CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[5,6-dihydro-3-(2,2,2-trifluoroethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

RN 487064-54-0 CAPLUS

CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6-dihydro-3-(2,2,2-trifluoroethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 487064-56-2 CAPLUS
- CN 1-Butanone, 3-amino-1-[5,6-dihydro-3-(phenylmethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-4-(2-fluorophenyl)-, (3R)- (CA INDEX NAME)

- IT 486460-14-4P 486460-15-5P 486460-16-6P 486460-17-7P 486460-19-9P 486460-22-4P
 - 486460-23-5P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of B-amino tetrahydroimidazo[1,2-a]pyrazines and
- tetrahydrotrioazolo[4,3-a]pyrazines as dipeptidyl peptidase inhibitors)
 RN 486460-14-4 CAPLUS
- CN Carbamic acid, [(1R)-1-[(3,4-difluorophenyl)methyl]-3-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, l,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 486460-15-5 CAPLUS

CN Carbamic acid, [(1R)-1-|(2,5-difluorophenyl)methyl]-3-|(5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, l,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 486460-16-6 CAPLUS

CN Carbamic acid, [(1R)-3-[5,6-dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 486460-17-7 CAPLUS

CN Carbamic acid, [(1R)-1-[(3,4-difluoropheny1)methy1]-3-(5,6-

dihydroimidazo[1,2-a]pyrazin-7(8H)-y1)-3-oxopropy1]-, 1,1-dimethylethylester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 486460-19-9 CAPLUS
- CN Carbamic acid, [(1R)-1-[(3,4-difluorophenyl)methyl]-3-(3-ethyl-5,6-dihydro-1,2,4-triazolo[4,3-a]pyrazin-7(6H)-yl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEN NAME)

Absolute stereochemistry.

- RN 486460-22-4 CAPLUS
- CN Carbamic acid, (1R)-1-[(2,5-difluorophenyl)methyl]-3-[5,6-dihydro-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxopropyl]-, 1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

RN 486460-23-5 CAPLUS

NN 408407-23-3 CAFMOS 408408-3 (trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-3-oxo-1-[(2,4,5-trifluorophenyl)methyl]propyl]-,1,1-dimethylethyl ester (9G1) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L8 ANSWER 62 OF 62 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 611239-95-3 REGISTRY
- ED Entered STN: 31 Oct 2003
- CN 1-Butanone, 3-amino-1-[(8S)-5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

- ONN 1.2.4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-1-oxo-4-(2,4,5-trifluorophenyl)butyl]-5,6,7,8-tetrahydro-8-methyl-3-(trifluoromethyl)-, (8S)- (9CI)
- FS STEREOSEARCH
- MF C17 H17 F6 N5 O
- CI COM
- SR CA

Absolute stereochemistry.

- L8 ANSWER 61 OF 62 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 611239-98-6 REGISTRY
- ED Entered STN: 31 Oct 2003
- CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[(8\$)-8-(4-fluorophenyl)-5,6dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

- CN Imidazo[1,2-a]pyrazine, 7-[(3R)-3-amino-4-(3,4-difluorophenyl)-1-oxobutyl]-8-(4-fluorophenyl)-5,6,7,8-tetrahydro-2-(trifluoromethyl)-, (8S)- (9CI)
- FS STEREOSEARCH
- MF C23 H20 F6 N4 O
- CI COM
- SR CA

Absolute stereochemistry.

- L8 ANSWER 60 OF 62 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 611240-79-0 REGISTRY
- ED Entered STN: 31 Oct 2003
- CN 1-Butanone, 3-amino-1-[(8R)-5,6-dihydro-8-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

- CN 1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-1-oxo-4-(2,4,5trifluorophenyl)butyl]-5,6,7,8-tetrahydro-8-methyl-3-(trifluoromethyl)-, (8R)- (9CI)
- FS STEREOSEARCH
- MF C17 H17 F6 N5 O
- CI COM
- SR CA

Absolute stereochemistry.

- L8 ANSWER 59 OF 62 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 611240-86-9 REGISTRY
- ED Entered STN: 31 Oct 2003
- CN 1-Butanone, 3-amino-4-(3,4-difluorophenyl)-1-[(8R)-8-(4-fluorophenyl)-5,6dihydro-2-(trifluoromethyl)imidazo[1,2-a]pyrazin-7(8H)-yl]-, (3R)- (CA INDEX NAME)

- CN Imidazo[1,2-a]pyrazine, 7-[(3R)-3-amino-4-(3,4-difluorophenyl)-1-oxobutyl]-8-(4-fluorophenyl)-5,6,7,8-tetrahydro-2-(trifluoromethyl)-, (8R)- (9CI)
- FS STEREOSEARCH
- MF C23 H20 F6 N4 O
- CI COM
- SR CA

Absolute stereochemistry.

- L8 ANSWER 58 OF 62 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 731771-83-8 REGISTRY
- ED Entered STN: 23 Aug 2004
- CN 1-Butanone, 3-amino-1-[(5S)-5,6-dihydro-5-methyl-3-(trifluoromethyl)-1,2,4-triazolo[4,3-a]pyrazin-7(8H)-yl]-4-(2,4,5-trifluorophenyl)-, (3R)- (CA INDEX NAME)

- CN 1,2,4-Triazolo[4,3-a]pyrazine, 7-[(3R)-3-amino-1-oxo-4-(2,4,5trifluorophenyl)butyl]-5,6,7,8-tetrahydro-5-methyl-3-(trifluoromethyl)-, (5S)- (9CI)
- FS STEREOSEARCH
- MF C17 H17 F6 N5 O
- CI COM
- SR CA

Absolute stereochemistry.

- L7 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2008 ACS on STN
- RN 799768-18-6 REGISTRY
- ED Entered STN: 20 Dec 2004
- CN 1-Butanone, 3-amino-4-(2,5-difluorophenyl)-1-[5,6,8,9-tetrahydro-3-[4-(trifluoromethyl)phenyl]-7H-1,2,4-triazolo[4,3-d][1,4]diazepin-7-yl]-, (3R)- (CA INDEX NAME)

- CN 5H-1,2,4-Triazolo[4,3-d][1,4]diazepine, 7-[(3R)-3-amino-4-(2,5-difluorophenyl)-1-oxobutyl]-6,7,8,9-tetrahydro-3-[4-(trifluoromethyl)phenyl]-(9CI)
- FS STEREOSEARCH
- MF C23 H22 F5 N5 O
- CI COM
- SR CA

Absolute stereochemistry.